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COURSE OF LECTURES

ON

DISEASES OF THE SKIN;

THEIR

HISTORY, PATHOLOGY, AND TREATMENT.

Delivered in the Middlesex Hospital, during the Summer Session, 1842,

BY

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LECTURE IV.

GENTLEMEN,—In my last lecture I laid before you and explained the system of classification which I intend shortly to submit to the profession,* and which I have entitled the *Natural System of Classification of Diseases of the Skin*. This system, I think, will will be found, upon examination, to be more useful in practice than the artificial, but otherwise excellent, classification of Willan; while its simplicity will render it at once available by those who may be pleased to give it their consideration. To those who are already familiar with the system of Willan, the natural system will recommend itself, by retaining the whole of his nomenclature, almost without change.

I shall now, Gentlemen, place before you a sketch of the history of classification in this department of disease, and endeavour to make you acquainted with the modern and generally received systems, in order to enable you to judge of their applicability, and compare them with the scheme which I have just proposed to you. In the well-trained and reflective mind, classification is coexistent with the first observation of facts, and we are not surprised to find that the earliest medical philosophers had made an arrangement of cutaneous maladies. Several centuries before the birth of Christ, Hippocrates, the father of medicine, and the lineal descendant of Æsculapius, established a classification of diseases of the skin, founded on the consideration of their *causes*, a classification that may be regarded as ETIOLOGICAL. The etiological classification arranges these diseases into two groups: a *constitutional group*, originating in causes of a constitutional nature, and determining to the surface of the body; and a *local group*, depending on a local morbid action in the skin itself, independently of the rest of the system. Lorry advocated the etiological doctrine, and a classification upon a similar basis has recently been propounded by a physician of Lyons, M. Baumés, under the title of "Nouvelle Dermatologie."

By those who have devoted attention to etiology, I think it will easily be admitted that there is no branch of medical research more difficult and obscure than the investigation of causes; and however advantageous it may be to be acquainted with the hidden springs of disease, it is unquestionably beginning at the wrong end to seek for the sources of those springs, without, in the first instance, being thoroughly acquainted with the nature and peculiarities of the soil in which they are imbedded, of the waters which they convey, and without tracing the streams into which they swell, by gradual steps, from the most obvious to the more obscure. Thus, however admirable in relation to practice the simple arrangement of Hippocrates may be, respective of the times in which he lived, no scheme can be more absurd at the present day, than the attempt to found a nosology on etiology alone. Let us suppose ourselves seated in judgment on the selection of a representative for our classification among the family of causes; shall we prefer the predisposing, the remote, or the proximate cause. We must proceed to a definition of each of these causes before it is possible to advance a step in our task, we require a definition, written separately and

* This promise has been fulfilled in the publication of the lecturer's work, entitled "A Practical and Theoretical Treatise on the Diagnosis, Pathology, and Treatment of Diseases of the Skin, arranged according to a Natural System of Classification," &c.

privately, by each of our members: we open the ballot-box, with a view to be decided by the majority, and we discover that no two of the writers entertain the same opinion in relation to their definition. How can they, when the terms remote, predisposing, and proximate, are relative and arbitrary. You know that medical men have the discredit of entertaining as many different opinions as there are men, on the subject of causes; in this particular we appear to deserve the accusation "quot homines, tot sententiæ." On this account, also, it is that medical practitioners figure so awkwardly in the witness-box, and for no other reason than that we allow ourselves to be enthralled by the multitude of causes, the cause within cause of our theoretical writers. I am reminded in illustration of this statement of an occurrence which, a few years since, happened to myself. I was called to inspect the body of a man who had died in an asylum for the insane; I found all his viscera sound, but on the exterior of the body were several extensive bed-sores; one of these in particular, on the elbow, had produced necrosis of the olecranon process of the ulna. I declared in my evidence that I found no other cause of death than the bed-sores in question. The gentleman who had attended the patient was next called upon to give his opinion as to the cause of decease; he ascribed it to paralysis. The jury were astonished, as well they might be; and their surprise was not diminished, when I explained that we were both of one mind as to the nature of the case, but that we had selected different periods of the same cause as the decisive cause. My friend attending the case through its course, naturally selected that period in which paralysis was the prominent and destructive feature; I saw the effects of paralysis, in themselves a potent cause. But it may be argued that an ultimate cause was developed subsequently to that which I detected, and that a primary cause had preceded the paralysis.

The whole of the diseases to which flesh is heir may be traced upwards to disordered innervation. Disordered innervation will represent the cause of the constitutional disorders of Hippocrates; while it may be asserted that a local disease cannot possibly exist without disordered innervation; or if that disordered innervation be inappreciable at the first, it may be augmented by the local disorder. The doctrine of causes appears to me to be so complicated and obscure, that I must confess my inability to comprehend a classification founded solely on etiology. Causes may be important *adjuvantia*, but I should certainly regard them as dangerous and unmanageable *principia*. The doctrine of Hippocrates, moreover, is mischievous in practice, by inclining too much to the exclusive use of local or constitutional means, and serving to perpetuate that most untenable division of medicine into internal and external; for it may be assumed that there is no disease, however local, that does not require for its proper treatment a thorough acquaintance with physiological or constitutional laws. So far as the father of medicine himself was concerned, a theoretical classification was of little consequence, inasmuch as in his treatment he pursued a judiciously expectant plan.

Thoroughly imbued with the doctrines of humoralism, Galen needed no aid from internal and local agencies; difference of *seat* was for him a ground of sufficient importance for the arrangement of cutaneous diseases, and he thus became the founder of the TOPOGRAPHICAL SYSTEM. Diseases of the skin were divided into two groups, according as they were situated on the *head*, or on the *body*; the latter comprehending all parts of the surface with the exception of the head. Jerome Mercurialis, an Italian physician of of the sixteenth century, pursued the same arrangement with Galen, but furthermore classified the diseases of the *body*, into such as were attended by alteration of *colour*, as vitiligo; and such as were remarkable for alteration of *smoothness*, comprising diseases which gave rise to elevation of the surface, such as vesicles, pustules, pimples, and even tumours. The plan pursued by Daniel Turner may also be referred to the system of Galen; he treats, in the first part of his work, on "Diseases of the skin in general;" and in the second, on "Diseases incident to some particular parts of the body," commencing with the diseases of the hair, and thence proceeding to those of the scalp and face. Like Hippocrates, however, he ascribes diseases of the skin in general to "inward disorders." Alibert, again, inclines to the topographical arrangement in parts of his classification, associating all the diseases of the scalp under the general designation "Teignes," and many of those of the general surface under the equally indefinite appellation "Dartres."

The objections to a topographical arrangement are at once obvious; the most opposite forms of disease seated on the same part of an individual, are liable to be regarded as similar diseases, while identical diseases, seated on different parts of the body, may be mistaken for distinct diseases, particularly when any difference of character referrible to stage of disorder is present. It is to the former of these objections that we must ascribe the obscurity which has so long involved diseases of the scalp, and which still exists with regard to those diseases. It is this which has rendered the genus Porrigo of Willan the confused assemblage of dissimilar diseases which we find it to be, a confusion that nothing but a more correct classification can remove.

The third classification met with among the older writers forms an era in the history of diseases of the skin, and is no less than

the original germ which became developed subsequently into the admirable ARTIFICIAL system of Willan. In the early part of the seventeenth century, Riolanus arranged diseases of the skin, without reference either to their cause or their seat, according to their external characters or appearances. He thus established three groups—Pustules, Deformities, and Tubercles. Plenck, a professor in the University of Buda, in Hungary, in the eighteenth century, extended the three groups of Riolanus to no less than fourteen classes. In order to attain this great number he fell into the error of establishing periods of the same disease as separate disorders, adding, by this means, very considerably to the complexity of the subject. The fourteen classes of Plenck are:—

Maculæ.	Callositates.
Pustulæ.	Excrescentiæ.
Vesiculæ.	Ulcera.
Bullæ.	Vulnera.
Papulæ.	Insecta.
Crustæ.	Morbi unguium.
Squamæ.	Morbi pilorum.

By a single glance at this table you will see the objection to which I allude; Crustæ may be the advanced stage of either Pustulæ, Vesiculæ, or Bullæ. Callositates and Excrescentiæ, in the same manner, may be periods of some of the preceding, and Ulcera and Vulnera are not admissible into a classification of cutaneous diseases.

Such was the condition of cutaneous nosology, when Willan applied a highly-gifted mind to the consideration of these diseases. It may appear but a small effort to have excluded some of Plenck's classes, and to have substituted others, but when the numerous and perplexing phenomena which present themselves in the study of the pathology of the skin are reflected on, we shall be better able to judge of the magnitude of his labours. The classification of Willan is admitted and followed at the present day in every country where civilisation has extended its blessings, and is admirably calculated to supply the answer to that most important question in the observation of every disorder—What is the disease? The essential difference between the classification of Plenck and that of Willan is, that the former established no precise period for his observations, whilst Willan, perceiving the changes presented by cutaneous diseases during their progress, foresaw the necessity of fixing the period of diagnosis unchangeably, and determined the stage for deciding the nature of the disease to be its height. It is true that this determination carries with it the objection that the nature of the morbid affection must remain unascertained until the disease has run a considerable portion of its course; but it possesses the advantage over the system of Plenck, that resting on definite data, the nature of the disease will be as apparent to one practitioner as to another; whereas, in the arrangement of Plenck, an eruption seen by one observer in its primary state might be set down and described as a papular disease; seen by another, in a more advanced stage, it might be regarded as a member of the class Pustulæ; and at a still later period, by a third, it might be considered to belong either to Crustæ, Callositates, or Ulcera, as the case might be.

The classification of Willan, for which, with his description of cutaneous diseases, the Fothergillian medal for the year 1790 was awarded, consists of eight orders, viz.:—

Papulæ.	Vesiculæ.
Squamæ.	Pustulæ.
Exanthemata.	Tubercula.
Bullæ.	Maculæ.

This classification is purely artificial, and may be likened to the Linnæan classification of the vegetable kingdom, to which it bears considerable analogy, not only in the circumstance of a given period in the existence of the object being selected for the determination of its systematic position, but also in the fact of disregarding entirely the natural affinities and properties of the object investigated. For it may be asked, How shall we determine the name of a plant, guided by the Linnæan system, before its bud has burst into blossom? or How shall we distinguish it when the flower has faded and its stamina and pistils are destroyed? The same queries apply with still greater force to cutaneous diseases. How shall we distinguish the punctiform efflorescence of Variola at its first appearance from that of Rubeola at its height? or how shall we discriminate between the papular stage of Variola and a copious eruption of Lichen attended with severe constitutional symptoms? Or, again, seeing a cutaneous disease at any other period than its height, how can we hope, by means of the Willanean code, to ascertain its real nature. But the most objectionable feature in the classification of Willan is the destruction of affinities which his arrangement engenders; the most dissimilar diseases are associated together in the same order, while analogous disorders are unwarrantably severed from each other. Thus, in his second order, we find grouped together *ichthyosis*, with leprous diseases; in the third, *purpura* with rubeola and scarlatina; in the fourth, *erysipelas* with pemphigus; in the fifth, *variola* and *scabies*, with impetigo and porrigo; in the sixth, *varicella* and *vaccinia* with herpes and eczema; whilst the seventh order is altogether heterogeneous.

Another objection, but of inferior moment, that may be brought against the Willanean classification, is ascribable to the nosological mania of the times in which its author lived; when the language of natural history was borrowed for the arrangement of diseases, and morbid phenomena were subjected to the restraints of classes, orders, genera, and species. It may be said that cutaneous

affections form a class of diseases, that this class is composed of groups, and the latter sometimes admit of division into sub-groups; but the groups and sub-groups are composed of individual diseases, which are distinct in themselves, and present modifications in their phenomena that may be regarded as varieties. But the differences between individual diseases are never so marked as to admit of the latter being considered as genera, and their varieties as species.

Willis, in the latter part of the seventeenth century, arranged cutaneous diseases into two groups, according as they were attended with or without tumefaction. The former he divides into general and particular affections, the former being sometimes accompanied by constitutional disorder, as variola, rubeola, scarlatina, &c., or having no specific febrile action, as lepra, lichen, &c. The diseases unaccompanied by tumefaction are chiefly those in which the colour of the skin is altered.

Shortly after the publication of the system of Willan, Alibert suggested a new arrangement of cutaneous diseases, to which he assigned the title of Natural Classification. The number of divisions which he established at this period were eight, viz.:—

Teignes.	Cancroides.
Pliques.	Lepra.
Dartres.	Frambœsia.
Ephelides.	Ichthyosis.

More recently Alibert modified this arrangement, he assembled all the diseases of the skin under one large group which he termed *dermatoses*, and this he divided into twelve groups; this arrangement constituting the celebrated "arbres des dermatoses" with its twelve branches. The twelve groups of Alibert's classification, are:—

Dermatoses	Eczemateuses.
,,	Exanthemateuses.
,,	Teigneuses.
,,	Dartreuses.
,,	Cancereuses.
,,	Lepreuses.
,,	Veroleuses.
,,	Strumeuses.
,,	Scabieuses.
,,	Hemateuses.
,,	Dyschromateuses.
,,	Heteromorphes.

The eczematous group includes erythema, erysipelas, pemphix, zoster, phlyzacia, cnidosis, which corresponds with urticaria; epinyctide, a nocturnal eruption, described only by Alibert; olophlyctide, the herpes of Willan; ophlyctide, or aphtha; pyrophlyctide, or malignant pustule; anthrax; and furunculus.

The *Dermatoses Exanthemateuses* are variola; vaccinia; clavelée, a varioloid of sheep transmissible to man; varicella; nirle, a varioloid; roseola; rubeola; scarlatina, and miliaria.

The *Dermatoses Teigneuses* are achor, which corresponds with impetigo faciei, or crusta lactea; porrigo; favus; and trichoma, or plica Polonica.

The *Dermateuses Dartreuses* are herpes, including, according to its ancient acceptation, all the squamous diseases; varus, including acne and sycosis; melitagra or impetigo; and esthioméne, or lupus.

The *Dermatoses Cancereuses* are carcinoma and keloide.

The *Dermatoses Lepreuses* are leuce, which appears to correspond with the leprosy of the Hebrews; spilo-plaxie, or the malum mortuum; elephantiasis; and radesige, the elephantiasis of northern climates.

The *Dermatoses Veroleuses* include syphilis and mycosis, a genus which in itself comprehends frambœsia and molluscum.

The *Dermateuses Strumeuses* are scrofula and farcinoma.

The *Dermatoses Scabieuses* are scabies and prurigo.

The *Dermatoses Hemateuses* are peliosis, or purpura; and petechiæ.

The *Dermatoses Dyschromateuses* are pannus, which includes lentigo, ephelis, pityriasis versicolor and pityriasis nigra; and achrome, the latter comprehending vitiligo and albinismus.

Lastly, the *Dermatoses Heteromorphes* are ichthyosis; tylosis; verruca; onygos or onychia; dermatolysie, or abnormal extensibility of the skin; and nævus.

This classification created a prodigious sensation at the time of its appearance, the epithets grand, sublime, and poetic, were lavished upon it by the ardent spirits of France, but now, it has ceased to be thought of, and has fallen into oblivion; no trace of it being to be discovered even in the halls in which it was first preached. The truth is, that it is too grand, too sublime, and too poetical, for the humble office of a guide to the comprehension of disease, and bears no comparison in point of simplicity and utility with the universally-received classification of Willan.

The term natural, as applied to this system by its author, is as little founded on fact as is the classification itself upon correct principle. Let me refer you, for a proof of my assertion, to the first group, in which you will find assembled together the simplest form of congestive inflammation, erythema; inflammations characterised by effusion of serum, pemphix and zoster; inflammation characterised by the production of pus, phlyzacia; urticaria; malignant pustule; and mortification of the subcutaneous cellular tissue. A more heteromorphous assemblage could scarcely be imagined. The second group is more natural, but even here we find miliaria allied with the variolous family. The third and the fourth groups I have already condemned when speaking of a topographical classification; the only similarity

between the diseases ranged under these two groups respectively being their seat of location. Thus, in the latter group, we have lepra; a disease of the follicles, acne, and sycosis; impetigo, one of the most simple and harmless forms of pustular disease; and next to impetigo that frightful affection lupus. After these examples I think we may conclude with an expression by no means uncommon in France—*mais, Messieurs, franchement, c'est un peu de trop.*

From the time of Alibert to the present little more has been done than the modification of the system of Willan. Plumbe has obtained the credit of suggesting a classification, but this is a mistake, for that author, after making a thrust at Willan, and risking the loss of his weapon in the encounter, distinctly states that his object is an "arrangement with a view to perspicacity rather than the substitution of a new classification;" indeed, to treat the subject with a view to the illustration of the constitutional causes of cutaneous disorders. This may be at once seen by a glance at the headings of the chapters of his work, which I shall proceed to quote. Chapter 1 treats of "Diseases which obtain their distinguishing characteristics from local peculiarities of the skin," such as acne, sycosis, and porrigo. Chapter 2 is devoted to "Diseases dependent on debilitated and deranged states of the system, and consequent diminished tone of the vessels of the cutis." This group comprehends purpura, scorbutus, pemphigus, pompolyx, ecthyma, and rupia. The third chapter comprises "Diseases exerting a probably salutary influence on the system originally produced by, and usually symptomatic of, deranged digestive organs, and characterised by active inflammation." These are porrigo favosa and larvalis, strophulus, lichen, prurigo, urticaria, herpes, carbuncle, and thrush. Chapter 4 is devoted to "Diseases marked by chronic inflammation of the vessels secreting the cuticle, producing morbid growth of this structure, constitutional causes or influence uncertain." The diseases assembled under this designation are lepra, psoriasis, pityriasis, pellagra, ichthyosis, warts, and corns. The fifth chapter includes "Diseases of a mixed character, essentially dependent on active inflammation, with which the constitution is not necessarily connected." These latter are impetigo, scabies, and eczema. This arrangement necessarily omits certain diseases which are not susceptible of being included under the above heads, such as variola, rubeola, scarlatina, varicella, erysipelas, elephantiasis, erythema, roseola, and syphilitic eruptions.

Biett and Gibert adopt the classification of Willan, with some slight modifications.

Rayer has published an arrangement of diseases of the skin, of a very extensive kind, which includes many diseases not strictly referrible to the cutaneous tissues. His primary division is threefold; namely, 1, into diseases of the skin; 2, alteration of the dependencies of the skin; and 3, foreign bodies on the surface, under, or in the substance of the skin. Diseases of the skin may be inflammatory affections having a *single elementary form*, which includes seven of the orders of Willan, and two additional orders, furunculi and gangrenæ; both, as it appears to me, unnecessary and objectionable, from increasing the complexity of an already difficult class of diseases. I should also protest against his order tubercula, comprising, as it does, lupus, scrofula, cancer, &c. Inflammations of the skin having several elementary forms, are syphilis, ambustio, and pernio. The second group of diseases of the skin are termed "peculiar states of the skin not referrible to inflammation;" such are anemiæ, congestus sanguinei, and hæmorrhagiæ. A third group includes "morbid states of the secreting functions of the skin," perspirationis et epidermidis. A fourth group comprises "neuroses of the skin," anæsthesia and hyperæsthesia. A fifth group "faulty structure, or unusual states of one or other of the elements of the skin," includes pigmenti; hypertrophiæ; gangræna simplex; cicatrices; defectus congenitus cutis; and extensio vel relaxatio insolita cutis. A sixth group comprehends degenerations, degenerationes fibrosæ; melanosis; and degenerationes tuberculosæ.

The *second division* of Rayer's arrangement—alterations of the dependencies of the skin, includes three groups:—1, Special diseases of the sebaceous follicles; 2, Special diseases of the piliferous follicles; and 3, Special diseases of the ungueal matrices, alterations of the nails.

The *third division*, or that constituted by the consideration of foreign bodies on the surface, under, or in the substance of the skin, comprehend all parasitic insects infesting the skin of man.

Devergie, the most recently appointed physician of St. Louis, condemns all classifications, from their inadequacy to comprehend the whole of the diseases to which the skin is liable. I do not think that he could possibly make that objection to the natural classification founded on the structure of the skin. He adopts, in his clinique, the classification of Willan somewhat modified, substituting the orders hæmateuses and dyschromateuses for maculæ; and introducing three additional groups,—vegetantes, to include favus; veneriennes, to comprise syphilitic affections; and corps etrangers, for dermozoa.

There remains still a classification to consider which possesses a high claim to merit, and which I regret to have been unacquainted with until my own arrangement had passed through the press. I allude to a "new distribution of diseases of the skin" which occupies the last leaf of a small work by Mr. Richard Hunt, entitled "A Practical

Synopsis of the Diseases of the Skin," published in 1838. In this distribution, Mr. Hunt classifies the diseases of the skin into eight sections, namely:—1. "Exanthematic fevers." 2. "Diseases having their positive characters manifested by inflammation in the true skin," including erythemata, papulæ, vesiculæ, pustulæ, and bullæ. 3. "Diseases having their positive character manifested by sanguineous effusion into the substance of the true skin." 4. "Diseases having their seat in the organs which secrete the epidermis." This group is objectionable, for the organs which secrete the epidermis are the same with those which are the subject of disease in the preceding sections. The author is here evidently led into error by the obscurity which at this time involved the structure of the skin; and by the hypothetical blennogenous apparatus of Breschet. The diseases admitted into this section, are referrible, some to the squamous disorders, as lepra, psoriasis, and pityriasis; some to hypertrophy of the dermic papillæ, as verrucæ and ichthyosis; others to disordered chromatogenous function, as chloasma, melasma, lentigo, and nigrities; one to disorder of the vascular elements of the dermis, nævus; whilst the remaining disease, pellagra, is certainly out of place in this group. The fifth section comprises "diseases having their seat in the follicles;" the sixth, "diseases having their seat in the cellular tissue of the skin." The seventh section is devoted to "diseases dependent upon organic alteration or degeneration of the substance of the true skin." This Mr. Hunt makes to include carcinoma, scrofula, melanosis, lupus, cheloidea, elephantiasis, and vitiligo. The eighth and last section treats of "specific diseases," under which head are classed syphilis, scabies, hydrargyria, frambœsia, and anthracion.

Such, then, Gentlemen, is a brief sketch of the history of classification of the diseases of the skin. I think you will agree with me that the palm for simplicity and easy application belongs to the system of Willan; and I trust that after this review you may be disposed to regard with some degree of favour the *natural* or *structural system* which I had the pleasure of explaining to you in my two preceding lectures. That a new classification was needed is, I think, fully confessed, not only in the almost universal deficiency of knowledge which exists with regard to these interesting diseases, but also in the recent condemnation, by Devergie, of all systems, because they are inadequate to the comprehension of the whole of the diseases to which the skin is liable. This cannot be said of a system which is based essentially on the anatomy and physiology of the skin.

LIEBIG,—HIS CHEMISTRY,

AND

REVIEWERS.

BY

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OBSERVERS of passing events cannot have failed for some years past to recognise the approach of a new era in the science of medicine. The practitioner who has imbibed his dogmas during his hospital pupilage, who, from inertness, indifference, or incompetency, rejoices in the conjectural nature of his art, who contemns its principles, closes his ears against its reasoning, and his understanding to its improvements, may proceed self-sufficiently, and empirically, to the termination of his career. The practitioner of this stamp may boldly vaunt his experience as the infallible criterion of the means that are available by man in alleviating misery and prolonging existence, and may continue to play upon the weaknesses and sufferings of humanity, and the contingencies of life, regardless alike of the advancement of learning, and of the useful practical results which flow from it.

But the disciples of a truly rational medicine, who are now daily filling the ranks of the profession, who, being active, emulous, and competent, are watching with a vigilant eye the progress of science, and are drawing continually from its tributary streams, for the means of rendering more complete their knowledge of the animal economy,—who seize with avidity every newly-developed truth, view it in all its relations, compare it with previously discovered truths, fix its legitimate value, and assign its proper locality,—who, slow to adopt crude theories, founded upon uncertain data; slower still in resorting to expedients of conjectural utility, both in medicine and surgery; arrive, albeit imperceptibly, at unerring principles, as the basis of a considerate and cautious, but an energetic and fearless, practice. Such men must hail with the liveliest enthusiasm, every new impulse received by the science, at a period of its history when there is promised a richer harvest of beneficial results than at any which has preceded it.

Animal chemistry, general and microscopic, is the point to which the attention of the latter is now directed. More perfect views of the phenomena of organic life; improved means of diagnosis and prognosis; a more rational interpretation of the symptoms of diseases, and some practical improvements, have already flowed from the science of che-

mistry. For a part of this we are indebted to our countrymen, Marcet, Ure, Henry, Wollaston, Dalton, Davy, Prout, Bostock, and, more recently, Bird and Rees, with others. But it is the continental school which has attempted to found organic chemistry upon the broader basis of an exact science; and of all the celebrated men engaged in this great undertaking, there is none whose name has acquired so just a pre-eminence as that of Professor Liebig.

Liebig's reputation is such, that there can be no surprise that his work upon "Animal Chemistry, or Organic Chemistry, in its Applications to Physiology and Pathology," should be received by the profession in this country as one of the most welcome presents which the genius of Europe could bestow, and that it should be most favourably commented upon by the writers in all our journals. But it is a little surprising that notwithstanding the high talent with which our periodical literature is generally conducted, and the numerous individuals of unquestionable competency engaged in it, there should not yet have appeared what may properly be called *a review* of this important production. Those which purport to *be* reviews are, for the most part, mere epitomes, drawn out very imperfectly, and without judgment, and loaded with quotations, without comment or examination of the facts and doctrines which they contain; or else they are abstracts, in which the language of the original is scarcely varied, most disappointing to the student, and valueless to the advanced reader, who appeals from the author to his commentator for the elucidation of that which is obscure, for the illustration of that which may be found difficult, for the correction of error, or for purpose of arriving, by a less circuitous route, at that which is most important and practically available. There are a few exceptions to these remarks, which I shall notice as I proceed, but I feel satisfied that the "reviews" of his work by the English reviewers must be most disappointing to the mind of Liebig himself.

It is on these accounts that I have undertaken a more complete analysis of the work, not for one moment assuming that I shall fulfil all the requisites of a commentator upon the labours of such a man as Liebig, but believing that the subject may be placed before the profession in a manner that is better calculated to excite attention to its more important features than has hitherto been done.

The author states explicitly that his work is "an attempt to trace the application of organic chemistry to animal physiology and pathology," and the preface contains some strictures on the results of experimental physiology. It is observed, that the most exact anatomical knowledge of the structure of the tissues cannot teach us their uses, and that the discovery of the laws of vitality cannot be effected without an accurate knowledge of chemical forces. That the imperfection of the method of research adopted by physiologists can alone explain the fact, that so few truths have been established respecting the functions of the most important organs. That, during the last twenty-five years, notwithstanding physiology has acquired new methods of investigation, the exhaustion of these sources of discovery, and the want which must soon be felt of fresh points of departure, must render it, although more extensive, neither more profound nor more solid. That the investigation of the uses and functions, and of the connection of the different organs, formerly the chief objects of research, and also the study of comparative anatomy, which has been so much cultivated of late, "have yielded no conclusions that are calculated to give us a more profound insight into the essence of the vital processes," and that with countless experiments we are not one step nearer to the causes and the essence of disease. One of the reviewers of the work disputes the fact, that

*Our Methods of Research in Pure Physiology are nearly exhausted.**

I am, however, disposed to believe that there is much truth in Liebig's opinion. It is in the same spirit as the following remark from Raspail:—"The physiologist who only takes account of the play of organs, and the laws of their functions, and that by appreciations founded on processes infinitely too rude, who appeals to masses of several pounds weight for a solution of the mystery of life, which is concealed in an atom,—who pronounces on the nature of an organ only according to the testimony of the anatomist's scalpel,—what has he bequeathed to science but a mass of insulated facts, placed, pell-mell, one after another, and never mutually explaining each other?" It may be added, how many cats, rabbits, horses, dogs, frogs, and donkeys, have been sacrificed at the shrine of physiology, purely considered? How many thousands of animals have been destroyed to learn the effects of poisons; and how few in comparison have been the useful results? The sacrifice of one life with a complete chemical, and microscopico-chemical, examination of the fluids and solids, as influenced by the agency which has affected it, we may assert, as fearlessly as the reviewer on the opposite side of the question has made his assertion, would furnish a far greater amount of positive knowledge than hundreds of sacrifices without such an examination; and in the same spirit we find our author remarking, that "for the purpose of investigating the laws of vital motion in the animal body, only one condition, namely, the knowledge of the

* British and Foreign Medical Review, October, 1842, p. 494.

apparatus which serves for its production was ascertained, but the substance of the organs, the changes which food undergoes in the living body, its transformation into portions of organs, and its reconversion into lifeless compounds, the share which the atmosphere takes in the processes of vitality, —all these foundations for future conclusions were still wanting."

What are the Opinions of the Author on the Subject of Life?

The work professes to be an attempt to apply organic chemistry to the science of life, and this is the question which first arises in the mind. It is the more important to investigate this point, in the first instance, because, as it appears to me, he has been greatly misapprehended respecting it. We find the reviewer just now quoted, asserting that the true relation of chemistry to physiology is misunderstood by Liebig;* and in the "Medico-Chirurgical Review" we find Liebig represented as holding, simply, that "in the animal we recognise as the ultimate cause of all force only one cause, the chemical action which the elements of the food and the oxygen of the air mutually exercise on each other."† I think I shall succeed in showing that both these representations are erroneous. There is another reason for inquiring, *in limine*, into Liebig's views respecting life, although the detail of them is contained in the third and last part of his book. It is that they evidently influence the opinions which he has formed upon many of the subjects that precede them, the deductions which he makes from the facts before him, and the theories which he constructs; and without a knowledge of his opinions upon the subject of life it is impossible to appreciate the importance of his more detailed investigations.

It is laid down as *a principle*, that vitality depends upon a peculiar and independent force. This force is in many respects analogous to the other powers of nature, all of which powers may be regarded, for philosophical purposes, as properties with which matter is endowed. Thus far our author is in accordance with the best writers on metaphysics in this country, and the principles which have been adopted by physiologists in accordance with them. But at page 209 it is stated that "there is nothing to prevent us from considering the vital force as a peculiar property, which is possessed by certain material bodies, and becomes sensible when their elementary particles are combined in a certain arrangement or form." In this passage it is perfectly clear that matter is regarded as being endowed with vital properties totally apart from organisation; that is to say, the oxygen of the air, the carbon, hydrogen, and azote of food, and other chemical elements, have vital as well as chemical properties, of which the former do not become manifest, but remain occult, until such elements have assumed a certain arrangement or form.

This notion in philosophy must be familiar to every reader. It is as old as Orpheus. It constituted a part of the doctrine of the ancient pantheists and naturalists. Saying nothing about the nature of the cause, the principle of life was regarded as inherent in all matter; when new matter becomes assimilated by an organic being, its vital principle was said to become manifest; when organised beings die, the matter is dispersed, still endowed with its vital principle, which becomes occult.

The "British [and Foreign" reviewer quotes a passage from a paper by Dr. Carpenter, in which the same notion is propounded. He first sets it forth as an important step in generalisation, and then awards the merit "due to the idea" to Dr. Carpenter.* I offer no opinion as to the advantage which may or may not accrue to physiology from adopting the notion; but this much may be said, that it is Dr. Carpenter and the "British and Foreign" reviewer, who advance it as an original doctrine, and not Professor Liebig.

The occult inherent vital properties of matter are not properly the objects of physiological investigation, and they are scarcely more than referred to in any other part of the work; the author restricts himself within the fixed limits of natural science, the study of phenomena, without reference to the nature or origin of their primary causes.

Regarding the vital force, then, as an independent force, Liebig proceeds, in various places, and in particular in the third part, to show the evidence which we have of its existence, and to trace the laws by which its effects are regulated.

The vital force is exhibited,

I. As a force of attraction.
II. As a resistance.
III. As a cause of motion, and change in the form and structure of material substances.

1. As a force of attraction it is seen in play in the growth of organised structures. Every cell and every organ grows by an influence within itself. Particles are brought by the vital attraction from a state of motion to a state of rest, or static equilibrium.

2. Particles are maintained in a state of equilibrium in a living structure, notwithstanding that at every moment of life they are subject to the influence of opposing forces. Thus, the *succus nutritius* is brought within the sphere of living attraction, being a chemical fluid, subject to those chemical forces which tend to alter the com-

* Lib. cit., p. 491.
† October, 1842, p. 343.

* Lib. cit., p. 497.

position, structure, and form of the substance in which life resides. But so long as life lasts, the vital force is in a state of resistance to those external agencies, and is thus a cause of resistance.

3. The vital force not only opposes a resistance to the other forces with which matter is endowed, but it overcomes those forces. In extreme texture it disturbs the chemical equilibrium of a part of the compounds brought within its sphere of action; bearing the inertia of atoms in mind, also, that motion cannot be acquired without a cause, and that, at each moment of life, and in every structure, a continued change of matter is going on, the vital force must overcome the chemical forces, and is thus a cause of motion.

This evidence is conclusive of the existence of an independent force, so long as we admit that the growth of living systems, the resistance offered by them to the action of the other powers of nature, and the vital motions exhibited by them, constitute an order of phenomena totally distinct and different from any other order of phenomona with which we are acquainted in the inorganic world.

The effects of this force must be regulated by certain laws, which are the proper subjects of physiological investigation. "These laws must be in harmony with the universal laws of resistance and motion, which preserve in their courses the worlds of our own and other systems, and which also determine changes of form and structure in material bodies." P. 196.

An investigation of the higher order of facts relating to living beings, is, in the next place entered into, and thereupon is made an

Application of the Laws which regulate other known Forces to the Vital Force.

The following is an abstract of this highly-important part of the work:—

I. The vital force approaches infinitely nearer to chemical forces than to gravitation, in its *modus operandi*. Like the chemical forces it acts only at insensible distances.

II. Like all known forces the vital force is recognised by two conditions of activity, motion and resistance, which differ entirely in their phenomena. It both communicates motion and destroys motion. Vital resistance is invariably the result of vital force in action. Hence we have the statics and the dynamics of the vital force.

III. An unequal degree of intensity of the vital force may obtain. Hence living tissues, like chemical compounds, present an unequal degree of resistance to the causes of change in their form and composition, and an unequal power of overcoming chemical action; hence, also, an unequal capacity of growth in the mass.

IV. The manifestations of vital force are dependent on a certain form and fixed composition of the tissue in which it resides; just as chemical compounds depend on a certain order or arrangement of their elementary particles for their unequal power of resistance to external disturbing causes, as those of heat, electricity, &c., and for their power of overcoming resistance, and of entering into new combinations.

V. The manifestations of vital force are dependent on a certain temperature. In the same way the manifestations of chemical forces are dependent on a certain temperature, owing to the relative attractions of their atoms being altered. Altering the force of cohesion in a compound by heat is sufficient to suspend or to produce chemical action. The decomposition of dead animal and vegetable matters is equally dependent on certain ranges of temperature, so that an animal carcase may be preserved in ice for ages, without any signs of decay. In the same way a seed which has been buried in a cold catacomb for centuries, displays its vitality in germination and growth, when it is raised to a proper temperature, and subjected to the other conditions essential to vital activity. In the constitution of animals there is an ample provision for maintaining a necessary temperature.

VI. The momentum of force in a living part is the available vital force, measured by the resulting motion or change of matter. The materials of the food conveyed to the living tissues being compounds of two or more elements, kept together by chemical forces, a certain amount of vital force must be expended in sustaining, resisting, or destroying the chemical forces. There must, therefore, be an excess of vital force in the living part before any decomposition can take place. This excess Liebig calls the momentum of force. By this excess a part has not only the power of retaining its condition, form, and structure, but it has a permanent power of causing decomposition. Hence the capacity of growth, which is determined by the immediate contact of living tissues with matters capable of becoming their component parts. The removal of this excess of vital force would not of itself endanger the existence of the living part, because the opposing forces would be left in equilibrio, but the part would lose its capacity of growth, and its ability to resist the causes of external change.

VII. Owing to causes (which will presently be described) of expenditure of vital force in the living animal, a part of the living structure is continually losing its vital properties. This part is accordingly deprived of its capacity of growth, and of its power of resistance, and it separates. An equilibrium between all the manifestations of the causes of waste and supply of vital force is the condition of health.

VIII. The oxygen continually absorbed in respiration and conveyed to every particle of the body, in chemical combination

with the globules of the blood, is the great chemical agent in the animal economy. That portion which is not consumed in the growth or reproduction of organs combines with the substance of those molecules which have lost their vital force, producing by union with their elements the act of transformation or change of matter. This is the chemical process of decay, and it is well illustrated in the progress of starvation. In the latter the vital force of the muscular and other structures becomes gradually exhausted, all resistance to the oxidising power of the atmospheric element ceases, the chemical process of eremacausis, or decay, proceeds, and the materials of the body pass off in the shape of oxidised compounds.

IX. A fresh momentum is added to the previously-existing momentum of force with the combination of the elements of the food. In other words, when the elements of the food become part of a living structure they acquire the living power,—the vital force inherent in them is enabled to manifest itself freely. This is remarkably illustrated in plants, in which the capacity of growth is almost unlimited, and accordingly with the increase of mass the sum of vital force is augmented. We see also in plants that the products formed from the food are varied according to the degree of activity of the vital force.

X. To the contrary of what happens in plants,—in the animal organism the manifestations of the vital force, in the capacity of growth, and in the resistance of external agencies, are confined within certain limits; the remaining momentum of force being expended in the shape of mechanical motion. This is the origin of all sensible motion, voluntary and involuntary, in the living animal. All mechanical effects are thus dependent on a change of form and structure in the substance of living parts, the amount of which change stands in the closest relation to the force consumed in the motions performed. As an immediate effect of motion, a quantity of muscular fibre, proportional to the force employed, loses its vitality, a rapid change of matter determining a greater amount of mechanical force and conversely. Living parts also lose their capacity of growth and power of resistance to external causes of change by the expenditure of the moving force. Hence we shall find, in future parts of our inquiry, that the sum of the effects of motion is equivalent to the quantity of living tissue which has become oxidised, and also to the amount of nitrogen in the urine.

XI. Each organ of motion does not generate the whole of the moving force in itself, but receives a portion of it, more or less according to circumstances, from distant parts. The necessity for some provision by which the momentum of force may be conveyed from one part to another here becomes manifest.

XII. The vital force is analogous to other forces, in that the momentum of motion is capable of being conducted by matters which do not, in consequence of an opposite manifestation of force, destroy its effect. The nerves fulfil this condition, and are the conductors.

As in a galvanic battery a force is set free by a chemical action, and the wire is its conductor; as this force communicates through the wire, in every direction, with amazing velocity; as the wire becomes a propagator of a series of manifestations of its activity; as by dividing the wire the propagation of force ceases, and at the same time the chemical action is stopped, and if the communication be restored the chemical action reappears; as the wire cannot be a resistance, since in that case it would convert a part or the whole of the moving force into a force at rest; and as by means of the force present (an immediate consequence of the change in the properties of the acid and the metal), the wire is capable of producing the most varied effects, chemical and mechanical; so

In the Animal Organism the Change of Matter is the Origin of the Vital Force, and the Nerves are the Conductors of that Force.

By means of the nerves, the limbs and all parts of the body, receive the amount of force that is necessary for the due performance of their functions. The excess generated in one part is conducted to other parts. The force which an organ cannot produce in itself for mechanical purposes is conveyed to it from other quarters. Even the vital force required by a part for the purpose of resisting external causes of disturbance, may be received from the excess of another part, an excess which that organ cannot consume itself. It is further found that living parts frequently possess a momentum of force which they lose in proportion as other parts acquire it, as shown by the loss of their capacity of growth and resistance. There is no other means of accounting for the loss of the momentum of force in living parts, but by its expenditure in mechanical motion; and by this expenditure only is it that an equilibrium is established between the chemical forces and the remaining vital force. In this state of equilibrium the change of matter, and the separation of the living tissues, in the shape of lifeless compounds, begins.

XIII. For carrying on the involuntary motions, a certain amount of force must be expended at every moment of existence, and consequently an incessant change of matter must go on. But in this case the change is confined within narrow limits, being directly proportional to the force required. Its amount has reference, however, to the

whole available force in the living animal, since the sum of vital force for mechanical purposes is equal to the sum of the momentum of force of all the tissues. It has reference also to the conducting power of the nerves. The power of producing mechanical motions in the limbs decreases with the increase of the involuntary motions, as in wasting fevers; and the power of the involuntary organs decreases, as a consequence of the large consumption of vital force in excessive labour. Numerous relations of this kind are pointed out in the author's work.

XIV. A much greater change of matter is produced in the living tissues by the application of the momentum of force to voluntary mechanical effects. The slightest motion of a finger consumes force, a corresponding portion of muscle diminishing in volume. The continued application of force in this way causes a continued separation of material particles from living structures, and the renewal of these parts of structures can only take place from the period at which the cause of waste ceases to operate. There must occur, therefore, in every individual a condition in which all voluntary motions are completely checked, and no further waste is effected. This condition is called *sleep*, during which the consumption of force in the involuntary motions, and accordingly the waste of matter in some particles of the living tissue, continues; but an amount of force is accumulated in the shape of renewed tissue, equal to that which has been consumed, both in involuntary motion throughout the whole period, and in voluntary motion during the preceding waking hours.

XV. *Death*

Is that condition in which all resistance on the part of the vital force entirely ceases.

The above is the bold attempt of Liebig to bring the science of life within the range of the exact or demonstrative sciences. It is an application of the fundamental principles of mechanical philosophy to vital phenomena. Some of its details will be more particularly discussed in a future paper. In the mean time it is necessary to state the admission of the author, that if it can be proved that the cause of vital activity has in its manifestations nothing in common with other known causes which produce motion, or change of form and structure in matter, all these conclusions will lose their force and significance. But with this admission, the prevailing sentiment which has governed his labours is,

That the Laws of Vitality, and of all that disturbs, promotes, or alters it, may certainly be discovered,

Although we shall never learn what life really is,—of what it essentially consists.

ON THE CAUSES

WHICH PRODUCE AND MODIFY THE

COAGULATION IN THE BLOOD;

WITH A CONSIDERATION OF SOME OF DR. COPLAND'S OPINIONS THEREON.

By William Watts, M.D., Nottingham.

The causes upon which the phenomenon of coagulation in the blood depend, do not seem to be sufficiently understood, or to be laid down with that distinctness and precision which they deserve. In consequence, many varied opinions are entertained upon the subject. Among others, those of Dr. Copland demand great attention, from his deservedly high scientific character, and from the diffusion they will obtain through the medium of his excellent work, "The Dictionary of Medicine." Whilst we consider the causes in question, we shall review his opinions, and attempt to show the incorrectness of some of them.

The blood is a compound fluid, one of whose characters is the endowment with very high vital power, which it derives from the ganglionic system of nerves; besides which its particles possess a property of rotation among themselves, independently of the onward motion given to them from the agents which propel it in its vessels.

As it is the source from whence all the structures of the body are supported and repaired, and is the fluid into which the nutrient particles of our food are converted, it is of importance to view it in its material as also in its immaterial properties.

It rarely happens that the exact quantity of our ingesta is just balanced by the amount of effete matter eliminated. The proportion of the nutrient particles in a given quantity of blood is therefore continually liable to variation; where the amount of food taken is larger than is needful for the actual consumption, the blood is richer in its composition than in those cases where it falls beneath the quantity required to support the demands made upon it; in the former instance, the clot will be proportionately larger than natural, in relation to the serum; and in the latter, it will be smaller. As its composition varies, so also will its vitality fluctuate in unison with the powers of life, the ganglionic system being excited or depressed. It is necessary to bear in mind that these changes may, and do, occur in the constitution of the blood, for as *they* vary, so will their manifestations vary; and as it is upon a right conception of these apparent trifles that the correct comprehension of the causes which produce coagulation depends, I have at the risk of being considered prolix thought it proper to state them thus explicitly.

Coagulation is the separation from the watery portion of the blood of its red particles, and the aggregation of these latter toge-

ther. How this is produced, and some of the various opinions about it, we proceed to consider. Dr. Copland, with others, considers that it depends upon the attraction of the red particles for each other being unrestrained by the vital power of the blood, which previously kept it fluid. In his "Dictionary of Medicine," vol. i., p. 167, art. Blood, par. 4, he says, "That this change (coagulation) proceeds from the *loss of vitality* sustained by the blood when removed from the frame." Again, par. 5:—"Generally, however, the blood soon separates into two portions—the serum and the coagulum, or clot,—and in this separation the red globules are principally concerned, it being chiefly their *loss of vital motion* which these globules possess in the vessels, and of the attraction existing between the colouring envelops and central bodies. As the vital action which keeps the red substance fixed around the whitish corpuscles ceases soon after the removal of the blood from the vein, *these bodies can then obey the forces which tend to unite them*, and they form a network in whose meshes the liberated red particles are entangled, and thus produces the phenomena of coagulation." In par. 6 he says, "Coagulation being the result of the *loss* of this endowment, and taking place with a celerity in proportion to the rapidity of its departure;" or, in other words, the sooner the blood loses its vitality the sooner will it coagulate. In the article on *Inflammation* (vol. ii., p. 27, sect. 5,) Dr. Copland says, "The cause of the coagulation of the blood is not to be found in external agencies, but in *the loss of the vital influence and motion* of the globules, proceeding from the causes just assigned—the power exerted by the ganglionic upon the vascular system." Again, in the article *Blood*, par. 6:—"In cases where the vital energy, or that manifestation of it exerted by the ganglionic nerves on the vascular system, is unexhausted, or is in a state of healthy excitement, coagulation is perfect, and somewhat slow; but when it is depressed or exhausted, the process is quicker, but much less complete."

The opinion expressed in this last quotation is somewhat at variance with that contained in the former, and will be seen to approach nearer to the truth.

Let us consider what conditions are absolutely necessary to be present in order that coagulation shall take place. Is it needful that it be removed from the influence of its vessels to effect it? The consideration of the way in which hæmorrhage from the mouths of divided vessels, and the phenomena observed in aneurism and in arteritis, show distinctly that blood will coagulate while it remains in its vessels, and that those alterations effected in the appearance of the coagulum by disease are to be found there likewise. The following post-mortem appearances, copied from a paper in THE LANCET of Oct. 15th by my fellow-townsman, Dr. Hutchinson, will most distinctly prove this. The case was one of arteritis followed by dry gangrene:—"The lining membrane of these arteries (the iliacs and femorals) was minutely injected and deeply coloured. In contact with the lining, and easily separable from it, a distinct layer of fibrin, several lines in thickness, quite separate and distinct, was observed, which completely covered the lining membrane of the arteries, and contained within it the red coagulum of blood in a perfectly solid state; this state of the contents of the arteries extended above on the right side into the external iliac artery; on the left to the middle of the femoral, and was continued towards the terminations as far as the vessels could be traced." Its removal from the influence of vital surfaces is not, therefore, a necessary condition to its production.

If a man be struck with lightning and die, the blood remains perfectly fluid, and will not coagulate either in its own vessels or any other into which it may be received. This instance is one in which the frame is at once deprived of its vitality, death being the consequence of the total and instantaneous destruction of organic nervous energy. *Vitality* is, therefore, a requisite. Further, if any cause, acting upon the vessels of the living body, impedes the motion of the blood in them, as the application of a ligature, or the blood be effused into any of the living structures, as in hæmorrhage and in aneurism, or blood drawn from a vein be allowed to remain at rest in the vessel into which it flows, then coagulation ensues. This is well known, and upon this quiescent state of the blood the successful termination of the operations for the cure of aneurism, and for the checking of hæmorrhage by ligature, materially depends; for if the ligature be applied so near to a large branch given off above it that the blood contained in the artery between the ligature and the branch be continually agitated, then a coagulum will not form, and hæmorrhage may be expected to follow the coming away of the ligature; but if the space between the two be sufficient to permit the blood to remain quiescent, the coagulum is speedily formed; or if the blood drawn into a basin be continually stirred for some time, it likewise will not coagulate. *A certain state of rest from its onward motion* (which is speedily followed by a cessation of its proper globular rotation), *and a certain amount of vitality, are, therefore, conjointly requisite to the formation of a coagulum.*

My own opinion of the cause of coagulation in the blood is, that it is the effect of the vital power of the blood acting upon its material particles in a quiescent state, either within or without the frame. I believe it to be the *result of an active effort of vital power*, and not of the *loss* of vitality, permitting inorganic attraction to follow its own laws. If this opinion be correct, it must be

capable of application to every variation that the blood is capable of assuming, either as regards its vitality or its composition.

I have previously mentioned that the blood may have its nutrient composition increased or diminished from the healthy standard, and we know that in various forms of disease the ganglionic influence may be either excited, as in sthenic inflammations, or depressed, as in typhoid fevers. I shall, therefore, now proceed to state the various appearances the blood assumes in the various forms, and show the application of my views.

A. In healthy blood, or that in which the serum and crassamentum are in normal proportions, and the vitality neither excited or depressed, the coagulum has a certain degree of firmness, offering a slight resistance to any body by which it is transfixed and is attempted to be raised up by, and besides the proportion of serum and clot being natural, the latter presents a *nearly plane surface.*

B. 1. Blood in which the nutrient particles are in excess, with a slightly depressed nervous energy, presents, on coagulating, a clot much larger in proportion to its watery particles than is the case in healthy blood, having less tenacity, so that it tears easily, and having a somewhat *convex* surface. Plethora offers blood the type of this condition.*

2. The nutrient particles being diminished, and the nervous energy at the same time depressed, the amount of serum exceeds its proper ratio, and the size of the clot is proportionately decreased, is of much slighter tenacity, and its lower portion is slightly miscible with the serum on agitation of the basin. Chorea and hysteria offer blood the type of this state.

C. In those diseases where there is sthenic excitement of the nervous influence the blood offers a character never seen in the preceding varieties of diseased blood; its surface is covered with a layer of fibrine more or less thick, on the production of which I shall hereafter offer some observations. Sthenic nervous excitement may arise from two very opposite causes, the first being a concomitant of active inflammatory disease in a previously healthy subject, while the second is the result of exhausting agencies rapidly applied, as, for instance, bloodletting too frequently and too largely practised for the relief of the very symptoms itself produces. The one I shall call primary sthenic excitement, or that of inflammation; the other, secondary, or that of reaction.

* Where there is excess of the nutrient particles above the healthy standard, the nervous energy is, except in more active disease, slightly depressed, being overpowered, as it were, by the exuberance of its support.

a. 1st. Primary sthenic excitement of nervous influence coexisting with a natural or increased proportion of nutrient particles; the clot is rather smaller in the former of these states than would be supposed, only because the force with which it has contracted is much greater than natural; while in the latter it is larger proportionately. The tenacity of the clot is here at its maximum, being such as to offer considerable resistance to any body attempted to be thrust through it, and to permit the clot being suspended on it, without its substance being torn through; the fibrinous layer on the surface of the clot is thick in proportion to the amount of the excitement, and the edges of it are turned upwards and inwards, rising above the level of the centre, and presenting the *cupped* appearance of the crassamentum of inflammatory blood; the entire coagulum is so firm that its lowest portion cannot be mixed with the surrounding serum. The blood of pneumonia and other acute inflammations offer the type of this condition.

2nd. Primary sthenic excitement with diminished nutrient particles.

The appearance of the clot in this instance still presents the buffy coat and cupped surface of the former, but the crassamentum is less in ratio to the amount of serum than in the standard blood.

b. Secondary sthenic excitement, or that of reaction, is usually attended with a diminution of the nutrient globules, and presents nearly all the characteristics which marked the blood of primary sthenic excitement, except that in proportion as the excitement is increased, if produced by repeated excessive blood-lettings (its chiefest cause), in the same ratio does the size of the clot diminish, while the buffy and cupped surface still remain; so that blood offering those characteristics may be drawn on the supposition it is inflammatory, or that of primary sthenic excitement, only a few hours before the patient dies of the exhaustion produced by this very abstraction. The chronic form of severe articular rheumatism gives blood the type of this state.

D. Asthenic nervous excitement. As this state is the result of a long continued struggle of the vital powers against the effects of increasing disease, it will, of course, be found coexisting only with a constitution of of the blood in which the nutrient particles are far below the natural standard.

Respiration and assimilation are imperfectly performed, yet nature battles with all her decreasing powers to carry on life. Blood drawn in this state presents a compound of the foregoing appearances. A buffy coat exists, but it is composed principally of albumen instead of fibrin; it is now no longer concave, but its surface is *convex* as in the clot of plethoric blood, from the weakness of the powers which cause the red globules to aggregate, and which holds them

together; there is little serum expressed from the clot, which forms quickly; the tenacity is extremely diminished, so that it is most easily torn. Phthisis and the result of extreme mercurialisation offer the blood which thus coagulates.

E. In depression of the nervous influence, without any reaction, the blood is only able to make an ineffectual attempt at coagulation; the upper part of the clot adheres with a very slight tenacity, while the lower portion is almost as fluid as the serum from which it can scarcely be said to have separated itself. In proportion as the depression increases the effort at coagulation is less. Typhus gravior, and the typhoid diseases in general, present the blood of this state in its varied grades.

F. The *absence* of all *vitality*. Here the blood remains *perfectly fluid*, and never forms a coagulum. This kind is found in cases where death has taken place from blows upon any part very largely supplied by the sympathetic nerve, or directly upon any of its ganglions; from lightning; from violent passion; from extreme hunger; from *coup de soleil;* from hydrophobia; from poisoning by prussic acid; and from true scurvy.

If the above division of the various appearances of the blood when coagulated, and of the states of system which produce them, be correct, then will the following deductions, perhaps, not be incorrect, but true and scientific:—

First. That the firmness and tenacity of the crassamentum are in a direct ratio with the state of excitement of the nervous influence, being at the maximum where it is the highest, as in acute sthenic inflammation, and at the minimum, as in typhoid diseases where it is the lowest.

Secondly. The formation of the buffy coat is dependent upon some peculiar tendency in the fibrin of the blood to separate itself from the red particles when the nervous system is in a state of morbidly increased excitement, whether that be primary or secondary. That such a tendency does exist, is, I think, sufficiently evident from the effusion of fibrin in acute inflammations underthe form of coagulable or organisable lymph. This excitement seems to be necessary to its production, though it need not amount to inflammation, for both are found to exist during pregnancy in some women, and a similar separation is seen to take place in diseases (phthisis, for instance,) where the composition of the blood is reduced, and its nervous energy alone is reacting; but it is a question I am not prepared to answer, whether the buffy layer upon the clot of phthisical and similar blood is not formed by albumen, the system not having power enough to animalise it sufficiently as to convert it into fibrin. Dr. Copland seems to be of this opinion also, as he says in his article on *Blood* (Dictionary of Medicine, vol. i., p. 191, par. 127), "In nearly all the cases where I have seen blood taken either in the state of depression or that of exhaustion, but particularly the latter, either little or no fibrin could be obtained from the coagulum, or what was obtained was scanty, and remarkably loose, and even flocculent, and nearly albuminous." That a certain amount of excitement must influence the nervous energy before the buffy coat will be produced, I may again quote the opinion of Dr. Copland in support of. He says, article *Blood*, par. 99, "Plenciz says, when the blood is not buffed in inflammations, the coagulum is always *more firm* than natural, an observation *which is tolerably correct in respect to the state of vital power*, but not as regards the presence of inflammation. It should not be overlooked that in many cases of acute inflammation, particularly in its early stage, the nervous power may be so depressed, and general vascular action consequently so imperfectly developed, that the coagulum will neither be firm nor exhibit any buff on the first and second bloodlettings; and yet when this oppression has been removed, a firm and sizy coagulum will be formed by the blood subsequently drawn." Again, in his appendix in the fifth edition of Richerand's "Physiology," he states,—"And that the buffy coat is merely one of the manifestations furnished by the blood, *indicating reaction of the powers of life*, or excitement of the vascular system."

Thirdly. That the concavity of the surface or cupping of the clot, is only a further result of the increased tendency of the fibrinous particles to cohere firmly when the blood participates in the general state of excitement of the nervous influence. *Cupping* seems to be thus produced: the upper portion of the clot, under all circumstances, contracts and coheres with a greater tenacity than the lower. Following this rule, the upper structure of fibrin may contract and cohere with greater power than its lower, the result of which will be to raise and curl the circumference upwards and inwards in a ratio proportionate to the state of sthenic excitement of vital power. If this explanation be correct then the converse may, perhaps, be so likewise, and the convexity of the surface of the crassamentum in the blood where deficient nervous energy is found, as in plethora and asthenic excitement, may arise from the partial absence of sthenic nervous energy.

Fourthly. That as we find, in proportion as nervous energy is excited the firmness and tenacity of the coagulum increase, and as it diminishes that these gradually lessen, until, in death from lightning, where the destruction of vital power is instantaneous and complete, no attempt whatever to coagulate is made, we must reject the opinion of Dr. Copeland that coagulation is "the result of the loss of their vitality by the particles of

the blood" as incorrect, and see that it is not in accordance with his opinions which I quoted when speaking on the formation of the buffy coat.

Fifthly. That the buffy coat of a coagulum may be formed even in the vessels themselves, as shown by Dr. Hutchinson's case.

Other remarks upon the *modus operandi* of various medicines in various forms of disease, and upon the indications for the selection of proper remedies, which might safely be deduced from the foregoing observations, I shall retain as the subject of another paper.

Nottingham, Oct., 1842.

EFFECTS OF ARSENIC ON DOGS.

A FRENCH journal having stated that a person possessing a large flock of sheep has cured the whole of them of pleurisy, by giving to each animal an ounce of arsenic, mixed with salt, and that he had tried the same remedy on a cow, without the least indication of poison, a correspondent of the *Ann. of Chem.*, mentions three instances in which he attempted to poison a small dog by the arsenious acid of the shops, tending to corroborate the above facts. He says, the animal had become old and afflicted with the mange. Of the first dose, put in paper (weighing more than two drachms), every particle was swallowed. In half an hour violent purging and vomiting took place, but leaving behind no unpleasant effects: on the contrary, the dog exhibited a greater sprightliness and vivacity than for months before. In a few days another dose was administered, of increased strength; but only purging, with less vomiting, was produced. The third dose was smaller (half a drachm), and had the effect of the two former, though in a much more moderate degree; the whole tending to the establishment of the life and health of the dog. About a drachm of the medicinal hydrocyanic acid some time after quickly destroyed life. It would seem, thus, that the poison of arsenic, with regard to its action on the animal frame, is greater in small quantities than large. I only regret that a dose of about ten grains was not given. On *horses*, the effect of arsenic is recorded in the *Lincoln Mercury*, with the following very different result:—A farmer, of Everton, had eight horses taken dreadfully ill, and, from the symptoms, suspected poisoning. A veterinary surgeon was sent for; but he had not been long on the premises before his horse was taken ill also. A minute investigation ensued; when it was found that the horses had been eating boiled linseed that had been cooked in a pot in which a solution of arsenic had been boiled many months before, in making a preparation for dipping lambs. Every remedy that skill could suggest was administered, but without effect: the whole eight died during the day, and the horse belonging to the veterinary surgeon soon afterwards.

LETTERS ON THE
TINCTURE OF CATECHU IN CASES OF SORE NIPPLES.

To the Editor.—Sir,—The friends of the tincture of catechu for sore nipples must be on the *qui vive*, or most assuredly this boon to suffering mortals will be lost to the many, from the unsatisfactory manner in which it was reintroduced by Mr. Farr through your valuable Journal, he being led to expect more than, *per se*, it can possibly achieve. I beg to refer your readers to my cautionary letter on the subject, page 95, LANCET, No. 998, trusting that in future the cases will be fair trials of its merits, which as yet has not been the case, which, with your permission, I will briefly prove, confining myself to the communications in No. 1000 of THE LANCET, not for the love of criticism, but fairly to point out the merits of the remedy.

The two cases related by Mr. Pottle are instances, additional to those of Mr. Davis, of using it out of season. Mr. Pottle reports that the nipples were extensively inflamed, with deep fissures extending from the base to the summit. The tincture was applied in the first case for a week, and in the second for ten days. He then desisted, as the sufferings of both patients were aggravated by its use. This its not giving it a fair trial; for, during the whole time, it was (I can state from experience) the least appropriate remedy that could have been selected. It was "adding fuel to the fire." What would have been the result had the tincture been withheld during that time altogether, and a light warm bread poultice had been applied to the nipples, mild aperients being given occasionally, followed by an appropriate febrifuge mixture? When the local irritation had disappeared, and along with it the constitutional disturbance had ceased, and not until then, the blessings of the tincture should have been sought. I was the last one to regard the tincture of catechu as a specific for sore nipples, experience having long taught me the contrary; and I can assure Mr. Davis, and midwifery practitioners in general, that if they will use their own judgment to pave the way for its use, its merits will be rightly appreciated, and it will take its proper position as a curative agent for sore nipples, not in "slight cases," as Mr. Davis observes, but rather on the decline of severe ones, after most other remedies that have been mooted have failed in mitigating in the least degree the acute sufferings of the patient, or healed the sloughy, spreading ulcers which threaten every moment the entire destruction of the nipple. I say no more on the subject at present on the ground that it is always adviseable to settle fairly one question before we hamper ourselves with another, especially as some practitioners not only read too hastily

(see Mr. Hopgood's letter, LANCET, No. 1000), but practise far too loosely to overcome any ordinary difficulty. At the very time when their exertions and readings are particularly called for, they resign the task to dame Nature, and then call this having some little experience in disease! Mr. Hopgood's hobby with the tincture of catechu will be a short one, I easily foresee, unless his practice lies exclusively among the poorest of the poor of his seven large parishes, for in the pauper cases the ulcers affecting the nipples no sooner make their appearance than they assume the sloughy condition, hence Mr. Hopgood's complete success with the trial of tincture of catechu—as yet. I am, your obedient servant,

J. H. HORNE, Surgeon.

Princes-street, Oct. 31, 1842.

Sir,—In the following case the tincture of catechu was used with the desired success:—The patient was a young woman whose right breast had suppurated and ulcerated prior to my seeing it. I then recommended her to apply the usual remedies, and she soon recovered. Upon visiting the child some time afterwards, I found that in the meantime the mother's left breast and nipple had become swollen, fissured, and extremely painful. I again recommended the customary remedies, but on this occasion without any benefit. Having read Mr. Farr's statement, I resolved to try the catechu, and the cure was rapid and effectual. It is worthy of observation that in using the tincture she accidentally dropped a small portion on one of her fingers, which had for some time been ulcerated and excoriated. The catechu was equally efficacious to the finger. The tincture was that made of the best catechu, and this leads me to suggest that the want of success represented in Mr. Davis's cases is, perhaps, to be attributed to the use of an inferior sort; for it is well known that there are two kinds, one much more expensive than the other, and therefore the less used. I make this statement through your valuable Journal, to do justice to Mr. Farr, to whose communication I feel myself much indebted. I remain, Sir, yours obediently,

JOHN CORNWALL, Surgeon.

Chichester, Nov. 1, 1842.

Sir,—After what had been written on the tincture of catechu for sore nipples, since the recommendation of Mr. Farr, I thought] it (although myself engaged in active midwifery practice, chiefly amongst the working classes) useless to trouble you with any remarks until I read the letters of Messrs. Davis and Pottle, which I considered might deter many practitioners from using so valuable a remedy. Mr. Davis, however, has tried it but in six cases (and in one of them, he says, it had not a fair trial), and Mr. Pottle only in two; both gentlemen saying that in their cases the inflammation was extensive. I think, therefore, that neither of them have given the tincture a fair trial. The cases were too few, and the inflammation should first have been subdued by emollient treatment. In fact, Mr. Horne (in No. 998) cautions the profession against its use "until the excitement has gone by, and the nipple has assumed a sloughy condition," then is the time, he says, when the *tr. cat.* exerts its beneficial influence, in which I perfectly agree. Fifteen cases in which I have used it (but not until they had assumed the *chronic* form) were all cured by it in less than a fortnight; the patients certainly complained of smarting on the few first applications, but not afterwards. I order the nipple to be wiped perfectly dry with a piece of soft linen after each time of suckling; the tincture to be then applied with a camel's-hair brush. If the fissure be deep, I direct an Indian-rubber shield to be used when suckling, and, in the intervals, a piece of lint, saturated with the tincture, to be kept over the nipple, due attention being at the same time paid to the bowels.

Mr. Davis, in THE LANCET, No. 1000, says, "If the case be left to itself, and the infant *removed from the breast*, nature alone would cure it." Certainly she would; remove the exciting cause, and the effects cease. For instance: a child is labouring under convulsions from indigestible food, a confined state of the bowels, or worms. In such case, thoroughly clear out the alimentary canal, and the convulsions cease. Instead of removing the child from the breast, I would recommend him to order the mother to suckle her infant through a shield. I am, Sir, yours obediently,

H. J. HINXMAN, M.D.

Bury, Lancashire, Nov. 1, 1842.

ASTRINGENTS, GENERALLY, FOR SORE-NIPPLES.

Sir,—The *penchant* of the public for "certain cures" has always been the grand source of charlatanrie. "What is good for a cough?" "What is a cure for a sore leg?" "For hooping-cough, sore nipples, &c.?" Such questions are frequent. When a demand is made a supply is sure to be afforded if a shilling can be made by it. Hence we have certain cures for everything, from corns to dropsy, and yet people are always hobbling about with the one, and dying from the other, as heretofore. The correspondence in THE LANCET on the catechu has led to these remarks. That the application is a very good one, is next to certain *à priori*, but the principle is as old as the hills. Astringent

applications, of various kinds, have been employed for such cases for many generations, but every accoucheur of experience knows that even this very good plan of treatment requires to be employed with discretion. It is not every case of sore nipples that will bear strong astringent applications. There are other applications first required, of a soothing nature, and in many of these cases local treatment alone will not afford much relief. I have never been foiled by sore nipples, yet I have no nostrum that will certainly cure all cases in all stages. Fomentations, and, afterwards, mild astringent lotions, with tincture of opium, as the local means, have been, in the more severe forms, very beneficial. In chronic cases I have no doubt that the catechu would, with proper attention to those circumstances which a respectable practitioner would observe, be a very good application, equal to lead, iron, copper, silver, or zinc, tormentil, bistart, galls, oak-bark, pomegranate-bark, or any other mineral or vegetable astringents. To enumerate all the applications that have been employed for sore nipples would occupy too much space. The popular remedies, such as house-leek, brandy, and port wine, have all performed "wonderful cures," by common report. If these remarks, from an accoucheur of thirty-five years standing, are deemed worthy to be recorded, perhaps you will give them a place in your widely-circulated LANCET. I am, Sir, &c.,

JOHN HOULTON.

London, Nov. 1, 1842.

THE PAR VAGUM AND NERVUS ACCESSORIUS.

CONSIDERABLE difference of opinion has of late existed among physiologists regarding the exact functions of the par vagum. Some maintain that it is entirely sensiferous and incident; others, that it also contains a few motor filaments. Scarpa, Arnold, Bischoff, Valentin, &c., have asserted that all the motor filaments of the pharyngeal and laryngeal branches of the par vagum actually come from the spinal accessory; while Müller, John Reid, Volkmann, &c., maintain that a few motor filaments are bound up in the par vagum at its origin, though they admit that the greater number of the motor filaments found in the trunk of that nerve, as it lies in the neck, are derived from the spinal accessory. Mr. Spence, in the "Edinburgh Journal," Oct., 1842, has proved, by minute dissections, that a few of the filaments of the par vagum are non-ganglionic, or motor, passing over the superior ganglion of that nerve, and joining themselves to the internal root of the accessory. The white nervous cord so formed by this junction can be traced down over the inferior ganglion of the vagus, to which it gives one or two delicate filaments, and at last seems principally to pass into the formation of the inferior laryngeal nerve.

THE TREATMENT AND THE MALTREATMENT OF DISEASE,

BY

WATER, HOT AND COLD.

To the Editor of THE LANCET.

SIR,—The following cases have recently come under my notice:—

A gentleman subject to *gout*, and actually suffering under an attack, chose, on his own judgment and responsibility, to keep the affected foot in cold water for a quarter of an hour, every morning. The pain, tumefaction, &c. were, indeed, by this means removed, but simultaneously a sensation of oppression, weight, fulness of the heart (symptoms previously unknown to the patient), set in, from which I have hitherto failed to relieve him.

A gentleman, subject to *rheumatism*, chose, like the foregoing, on his own responsibility, and misled by the reports from Gräfenberg, to take the cold bath, irrespective of the feebleness, the cachectic complexion, and the very diminished reactive power of his constitution. He has paid the penalty of his imprudence by bringing on himself a cardiac affection, more serious even than that of the person just referred to, and which will, in all probability, conduct him to a premature grave.

A gentleman subject to *rheumatic-gout*, whose stomach is almost continually acid, and whose kidneys act indifferently, has, after a perusal of works lately published on hydrous treatment, accustomed himself to swallow vast quantities of water, at all times of the day. He has been benefitted in consequence. His urine, which was lately scanty and turbid, is plentiful and clear. His stomach is less deranged; his rheumato-arthritis very considerably relieved. I ought to notice that, to the first draught which he took in the morning, he added a few grains of the tartrate of soda and of the carbonate and super-tartrate of potass, which, no doubt, guided to the kidneys the large quantity of water which he subsequently swallowed during the day.

A gentleman, who also indulged freely in cold water, seems to have transferred a *rheumato-gouty* affection from the heart to the cervical muscles and ligaments, the scalp, and the *dura mater*.

It may be said that these cases were not treated strictly according to Priessnitz's method, nor were under the care of a hydropathic* physician. While we grant this, we think it proper to adduce them as illustrations of the extreme facility with which rheumatic and gouty affections are displace-

* I need not point to the Bœotian ignorance implied in the coinage of the word "hydropathy."

able from external to internal parts; of the great hazard of treating these in the heroic manner which Priessnitz dares to do, by cold external applications; of the great power of cold applications in producing metastases; and of the necessity of the medical press being much more explicit and energetic in their cautions against the extreme dangers of this treatment, employed in the indiscriminate manner of its author; since it is evidently a means which, from its very simplicity and apparent, but *only* apparent, safety, is extremely likely to be abused by private persons, as the cases I have adduced plainly prove. I have to add, that several cases regularly treated by disciples of Priessnitz, and by the quack himself, have come to my knowledge, in some of which no benefit has followed, while in others ill effects have ensued.

That success attends hydrous treatment may be admitted, but the benefit is attributable to the water operating in one of two ways,—either as an evacuant and diluent, or as a means for applying externally heat and cold.

Water, used as an evacuant and diluent, and taken at, or not considerably under, the temperature of the body, is generally an innocent, if rarely a very efficient means. It is certainly sometimes beneficial in diluting irritating secretions in the stomach, bowels, or urinary organs, and in favouring, by this dilution, the elimination, by kidney or intestine, of matters which otherwise would, in consequence of their acrid action on the organs referred to, cause dysuria, constipation, diarrhœa, or dysentery.

But it is chiefly as a convenient medicine for the external application of heat and cold that water is important; and, to speak with correctness, the term HOT and COLD ought to be substituted for WATER treatment,—since varied *temperature*, applied through the medium of gas, or of liquid or of solid substances, as, for example, fluid mercury or plate-iron, heated or cooled, would produce precisely the same effects as the external application of water. So far, then, as Priessnitz and his followers imagine that the efficacy (such as it is) of their treatment lies in the use of cold water, peculiarly and essentially, they prove themselves to be what they are, empirics, ignorant of the *modus operandi* of their own remedy. It is to be acknowledged, indeed, that water, on several accounts, possesses advantages over the other media for heat and cold above-named; but this advantage is subordinate and incidental, not principal and essential.

Now, the use of water, as a medium for the external application of heat and cold, is the most delicate and important possible; and none of the journals, professional or general, has sufficiently exposed the barbarous ignorance which, in this particular, characterises the practice of Priessnitz. On the contrary, in several of the medical journals have appeared, during the last few months, notices of cold-water treatment, which have surprised me by the placidity and indifference—the all but approbation—with which they speak of the practice referred to. One of our principal poets, in drawing the portrait of a contemporary, described him as possessing a power to—

> "Without sneering others teach to sneer."

Some of our medical reviewers have, in relation to the cold-water treatment, exhibited a quality converse of the one mentioned above, but no less inconvenient; namely, that of "without approving, teaching others to approve." For such, I am sure, is the effect which the far too *clement* critical notices referred to will have, and already have had, on numbers of the professional and non-professional public.

The cases with which I have commenced this paper are striking proofs of, I may well say, the terrible power of that remedy which Preissnitz and his followers rudely and mistakenly wield, and indiscriminately apply. An examination the most slight of the principles and modes of treatment of this uninformed Silesian peasant, must compel every inquirer to adopt one of two conclusions; either that the practice followed by the most intelligent, educated, experienced and observant men, from Hippocrates to Chambers, has been in a great measure useless and illusory; or that Preissnitz is an empiric whose successes are casual, and the only apology for the inconceivable rashness of whose measures, and for the diseases and deaths he is causing, are his *possible* sincerity, and his *certain* ignorance.

What stronger proof can be given of the narrow-mindedness and gross ignorance of the man, and the extreme meagreness of the facts and analogies on which, so far as he himself is concerned, his practice is founded, than the circumstance that because he saw an empiric, like himself, apply the water-cure to cattle, and because he himself healed, or supposed himself to have healed, a fracture in his own person, by the same means, he should infer that those means were to be universally applied to the varied forms of constitutional (medical) disease, as occurring in the human subject; that gouty headachs were to be cured by persistent immersion of the head in cold water,—costiveness, depending on so many causes, chronic and acute, to be combated by cold and wet compresses applied to the abdomen,—that persons labouring under febrile diseases, and the exanthemes, scarlatina, small-pox, &c., if not sufficiently robust for still ruder treatment, are, at least, to be wrapped in cold wet sheets,—that inflammations of the lungs and of the abdominal organs are to be treated by cold, wet, and evaporating cloths, placed on the chest and belly, and frequently

renewed? We may well shudder at the bare recital of such fatal absurdities, and may well feel ourselves at a loss for language to express the grief and indignation which we feel at the thought of the numerous lives which must, ere this delusion expends itself, be sacrificed by this man's means and through his suggestions!

As the measures now enumerated are *exactly* those most fitted, especially in the case of persons already predisposed, to produce the diseases they are recommended to cure or avert, it follows that it must be altogether owing to the improved health which mountain air, exercise, and a dietary less exceptionable* than the one they are used to, produces in Priessnitz's patients, that enables them to stand with impunity his peculiar treatment. Thus, then, it is precisely those parts of the treatment, and of the means he avails himself of (air, exercise, regulated diet, &c.) in which he *coincides* with other practitioners, which enables Priessnitz's patients to endure those parts of his treatment in which he *differs* from others!

A writer in the "British and Foreign Medical Review"† observes,—"It is but just to admit the improbability of as many as fourteen hundred patients in one year, and for several years in succession, submitting to such a course of treatment, unless it were in many cases beneficial." Granting that, from the cause assigned in the last paragraph, Priessnitz's treatment may, in some or many cases, be beneficial, I would remark, that in numerous instances patients are very incapable of judging of the effects of treatment, especially in cases of chronic disease. A quack may, to a considerable extent, relieve a patient temporarily of the suffering attendant on some chronic affection; and this may, by him and his victim, be called a cure: while by the very measures by which immediate suffering is alleviated, the seeds of a mortal malady are sown. This is illustrated in my first case. The patient who had been confined for a month or two by a hot, painful, and tumid foot, was delighted with his recovered ability of locomotion and out-of-door exercise: the cardiac affection scarcely at first interfered with his recreations or comfort, but by-and-by it began to prove troublesome, and I cannot adequately depict his mingled consternation and indignation on learning that in consequence of his foolish credence in a senseless practice, senselessly eulogised, he had exchanged a comparatively mild and a not dangerous affection, for one in the highest degree hazardous and distressing.

The same reviewer, from whom we have just quoted, remarks,—"Practically we must all own, that we can cure very few diseases without producing evacuations;" and he then proceeds to express himself as if crises in disease were common occurrences. We dispute both propositions; and we would more especially question the truth of the remark, that "*evacuations*" are *indispensable* to the cure of many or of most diseases. In cures which are effected, in a great measure, by the natural powers, and in those which nearly approximate to these, namely, cures effected by hygienic means, wholly or chiefly, there are usually no *sensible* evacuations. Morbid matters, whether evacuated by skin, intestine, or kidney, are generally eliminated in an insensible manner. It is only the most dangerous and ignorant quacks who anxiously seek to procure crises; and accordingly this haphazard boor welcomes the "abscess of the ear" caused by the use of cold water in gouty headach, and calls it, forsooth, critical and beneficial!

It is precisely in the state in which Preissnitz most uses it that water is most dangerous, namely, at a *cold* temperature. The external use of water in a hot state is fraught with little or no hazard. We risk no bad consequences in endeavouring, by local or general applications of hot water, to *invite* a rheumatic or gouty affection from the heart, the brain, or the stomach, to the feet. But we run immense risk, and we hazard the patient's life, when we do anything which may displace a rheumatic or gouty affection from the foot or from the dorsal muscles; for we cannot tell to where we may cause the metastasis. It is seldom that we succeed in dissipating a rheumatic or gouty affection in any degree chronic, by *cold* external applications; and if we do not succeed in dissipating it we almost invariably force it on internal organs. Hence the high dangers of Priessnitz's plan; hence the serious responsibility of such persons as Mr. Claridge, who ignorantly meddle with matters in which they are entirely incapable of judging; and hence the propriety of the press, both professional and public, lifting its voice promptly against this most pernicious delusion, by which, as is the case with all fresh exhalations of charlatanism, or stupidity, many lives are sacrificed before the public is disabused of its childish credulity and medical men roused from their culpable

* Priessnitz's dietary is far from exceptionable: cucumbers, pastry, sauer kraut, &c., are freely allowed.

† Mesmerism and homœopathy were the fanciful inventions of *physicians*. Hydropathy is the monomania of a man utterly devoid of both medical and general education. How calculated to impress the public with an idea of the utter vagueness of all medical facts and principles is the attention, the tolerance, and praise which Priessnitz's doctrines and practice have received from some of our leading medical journals.

remissness. I am, Sir, your most obedient servant,

ROBERT DICK, M.D.
Upper John-street, Golden-square,
London, Nov. 1842.

SOME TRUTHS IN MEDICINE
THAT MAY BE
ALLIED TO HERESIES.
HOMŒPATHY AND HYDROPATHY.

Do not disdain, Gentlemen,* taking a hint now and then from heretical professors, for the good of your patients; for in most of the heresies in medicine, as in religion, there may be a portion of truth; for instance, homœpathy has two principles, one, that diseases are cured by substances which produce such diseases, as bark is said to cure ague, because it produces ague in healthy persons (though I confess that, in a large experience, I never saw any such effects), or as diarrhœa is cured by purgatives. The second principle is, that those substances must be given in infinitesimal doses, and that in the trituration which is essential to such minute subdivisions new powers are developed. To the first principle much exception may be taken though there is plausibility in it. The artificial action is not the same, though somewhat like. The evacuations produced by the purgative that cures a diarrhœa are very different from those that constituted the diarrhœa, and argue a dissimilarity in the state of the membrane that furnished it. The inflammation produced in the eye by the nitrate of silver is different from the inflammation which it removes. Still, something may be learned from the dogma; namely, that inasmuch as certain substances do produce a morbid change, which is often subversive of spontaneous disease, and also itself easily removable, we may with benefit use such substance. Often the difficulty in practice is to find a substance that will act upon the seat of disease; but the discovery of one that induces an effect like the disease, shows that we have a substance likely to engender in the seat of disease an artificial evil that may supersede the spontaneous. As to the other principle I utterly disbelieve it. No *à priori* evidence has been adduced in its favour; and my faith is not to be obtained by trying whether the decillionth of a grain of opium produces its reputed effects. Egregious absurdity, I say. But what, you ask, is to be made of the apparent homœopathic cures? Simply this, that the expectant method is in this system carried to the fullest extent. The natural tendencies to recovery have full play, and are often aided by the suspension of meddling treatment, and by judicious diet, the latter being all the positive operation of the homœopathic system, the rest only negative.

Hydropathy, imported from Silesia, consists in an employment of cold water, both internally and externally—the extended use of a remedy familiar to every practitioner. Perhaps something may be learned from this system; but one is amused with its pretensions, which are to overturn all other methods of cure.

That the shower-bath, or cold-sponging, or the plunge-bath, is an efficacious tonic, nine-tenths of us are daily impressing on patients. It is an efficacious auxiliary in repressing certain inflammatory and hæmorrhagic diseases. Hundreds of sick persons are ordered by their physicians to have cold cloths on their scalps in meningitis, to swallow iced drinks for cynanche, or gastritis, or hæmatemesis, or hæmoptysis; to have pails of cold water emptied over the abdomen for hæmorrhage after parturition, to dip into cold hip-baths for menorrhagia, or to keep their wounds wet with cold water-dressings. Such directions you may find abundant in the work of Dr. Currie, in the treatise on cold by M. Beaupré, in an admirable article on bathing by Dr. Forbes in the "Cyclopædia of Medicine." The mere ingestion of large quantities of liquids often produces most beneficial results; and their utility may be traced, as Dr. Holland has well shown, to their mere mechanical effect in washing away matters, excrementitious or noxious, from the alimentary canal; their influence in modifying the blood; and their effect upon secretion and excretion, especially the kidneys and skin. For this knowledge we need not depend on Vincent Priessnitz. True, this individual is endowed with great natural sagacity, shown remarkably in his selection of favourable cases for the water-cure; many individuals he rejects as unfit for the process. But the water-cure, when carried fully out, often produces boils and ulcers on the skin, and the hydriatic doctors consider these eruptions as critical,—the elimination of morbid humours; but we can account for them as the chronic congestion, inflammation, and suppuration, ensuing on the assiduous application of cold water. Such effects are often produced in thinly clad persons, by mere exposure to the inclemencies of the atmosphere. The counter-irritation is, no doubt, in many of the cases very beneficial, the sores in question having the same curative influence as our issues and setons.

To what circumstances does hydropathy owe its popularity? First, the system is very simple; secondly, the remedy seems to harmonise with its universal distribution over the globe; thirdly, the system dispenses with drugs, most of which are disagreeable, and many dangerous; fourthly, it employs the superabundant energies of the invalids.

* Abstract of remarks by Dr. Symonds to his class at Bristol, Oct. 1842.

Physicians are often at a loss in recommending occupation to the hypochondriac, to whom nothing is interesting but what refers to his health; fifthly, sweating, one result of the system, is in much favour with invalids. Patients always attach great importance to perspiration, really one of the most advantageous results of the process. I know a gentleman who for many years has had the greatest difficulty in procuring action of his bowels, and to him the sudorific process of the water-cure has been beneficial in compensating the alvine deficiencies. Lastly, the outward use of cold water creates a glow or reaction, giving the idea of an invigorating effect, often far beyond what is really imparted. Moreover, the use of cold water begets the desire for its repetition. Every one who has accustomed himself to plentiful ablutions of cold water, when debarred from their use feels annoyance on the loss of a stimulus.

As I began with observing, some useful additions to practice may, no doubt, be gathered from observing the peculiar methods adopted by the hydriatic professors; but after the popular excitement has passed away, cold water will find its proper level; it will be known as a valuable expedient under certain circumstances, many of which are yet to be learned. The hypochondriacal, the nervous, and the victims of satiety, as they at one time invoked the mummeries of mesmerism—at another swallowed hundreds of pills—or at another flew to Baden Baden and Schlangenbad, and were disappointed—now appeal to hydropathy, perhaps with better success. But the subjects of fevers, exanthemata, and acute visceral inflammations, the unhappy sufferers from organic diseases, those broken down by hæmorrhages and exhausting discharges, and those who require the knife of the surgeon, will remain adherents of the practice which has been built upon the observation of disease for centuries, and the improvements which every year adds to our knowledge of the human body in health. You will hear this subject adverted to in general conversation, and you may be appealed to. I advise you to avoid expressing annoyance at its vaunted success. Content yourselves with stating that you cannot receive a theory of disease and cure from persons who have not studied anatomy and physiology, and that as for the alleged success, before you account for it you must be assured that the persons who witnessed the cures were capable of ascertaining that the alleged disease had really existed.

The empirical system of hydropathy, though practised by Priessnitz, at Gräfenberg, for some years, has not been brought before the public in England systematically till within the last year. The "water-cure," as an universal panacea, is about as absurd as the philosopher's stone. But as a means of remedying many diseases it is a valuable addition to therapeutics. Though numerous medical writers have praised water as a remedial agent, we think it has been too seldom used, and probably the system of Priessnitz may eventually place the therapeutic agency of cold water more strikingly before the public mind. Already, in the hospital of St. Louis, M. Gibert has submitted eight patients to the external as well as the internal application of cold water, for severe diseases of the skin. Two cases of ichthyosis, and one of prurigo, were completely cured. The others (cases of lepra) much alleviated, excepting one of lichen agrius, in which the treatment was suspended on account of its producing an affection of the chest. It will be the part of sound eclectic philosophy to purge the dross from the pure metal, and to appropriate what is really valuable even of the most empirical systems.—*Messrs. Spooner and Smart's Retrospect of Medicine.*

HORSES SWALLOWING SPONGES.

Mr. Rickwood, of Retford, says (*Veterinarian*, October), an extraordinary case has lately come under my observation of a horse swallowing a piece of new sponge, without the slightest inconvenience to him, although he did not pass it until nine days afterwards. The sponge, a new piece, had not undergone digestion in the slightest degree. I once met with a horse swallowing a sponge, not a particle of which was voided undigested, but the patient was ill to an alarming degree. There certainly was a difference with respect to the food of these two horses; the former had been kept upon hard meat for two or three years; and the other upon his natural diet, he having been at grass for some months. That being the case, I should have imagined that the sponge would, in the latter, have passed off in a few hours; the contrary to which I have mentioned. A third case is recorded in the same work, for the present month (Nov.), by Mr. Fry, of Great Torrington, who says, having never heard of such a case before, I rather doubted the swallowing. But the owner, to be doubly sure, took another piece and offered it to him, which he immediately seized, and with difficulty got it again. The horse was now labouring under symptoms of spasmodic colic. I gave him a carminative draught, and afterwards an oleaginous one, with aloes in solution, and every symptom left him excepting a little dulness; but nine days afterwards I found him labouring under violent spasmodic colic. Again I administered a carminative draught, as before, with considerable relief; and afterwards an oleaginous draught, and by-and-by a clyster and another draught, until the bowels responded, and then he went to work in a few days, but not a particle of the sponge could be detected in the fæces.

PROTRACTED SUCKLING.

Sir,—In The Lancet for October 22, the effects of over-lactation are recorded, as producing what every experienced man must have occasionally met with, *most dire misery;* but observing that three years and a quarter were in *civilised life*, noticed as an "unwarrantable period" and a "monstrous proceeding," I referred to my note-book for an entry which I had made when discussing this matter with a most intelligent barrister, in whose family the question was raised as to whether the wet-nurse who had suckled one child was in a fit state to take a second of his infants, thirteen months after she had begun suckling the first. I considered that she was fit, and she took the child, and would have continued her office, I do not doubt, with advantage, had not casual illness obliged her removal from the house.

The following remarks from Dr. Adam Clarke's notes on the Old Testament, may not be uninteresting:—"At what time children were weaned among the ancients is a disputed point. St. Jerome says there are two opinions on this subject. Some hold that children were always weaned at five years of age; others, that they were not weaned until they were twelve years. From the speech of the mother to her son, 2 *Mac.* vii, 27 ('Oh, my son, have pity upon me, that bare thee nine months in my womb, and gave thee suck three years, and nourished thee, and brought thee up'), it seems likely that among the Jews they were weaned when *three* years old; and this is further strengthened by 2 *Chron.* xxxi. 16, where Hezekiah, in making provision for the Levites and priests, includes the children from three years old and upwards, which is a presumptive proof that previous to that age they were wholly dependent on their *mother* for their nourishment. Samuel appears to have been brought to the sanctuary when he was *just weaned*, and *then* he was capable of ministering before the Lord (1 *Sam.* i. 22—28); and this certainly could not be before he was *three* years of age. The term among the Mahomedans is fixed by the *Koran*, xxxi. 14, at two years of age."

Again, Mr. Catlin, in his account of the North American Indians, states that "Indian women seldom have more than four or five children," and he never recollects "to have met with a case where two or three children were born at a birth," although he has travelled extensively. He thinks that "the reason why the Indian women have not large families arises from the length of the period of lactation, which is generally two, sometimes three, and even four years. Yours respectfully,

W. T. Iliff.

Newington, Nov. 3, 1842.

SIMPLER MODE THAN MR. DENTON'S,

OF

PREVENTING THE OBSTRUCTION OF CATHETERS.

To the Editor.—Sir, In a letter in The Lancet, No. 1001, headed "Obstruction of Catheters by Coagulated Blood," the injection of warm water is recommended by Mr. Denton, of Hornsea, as a certain means of removing such obstructions. Permit me to bear testimony to the good effects of this remedy, and at the same time to suggest *a more simple mode of procedure.* When I was an apprentice (about twenty years ago) I visited an elderly patient at Upavon, Wilts, who was suffering from enlarged prostate and retention of urine. I passed the catheter into the bladder, and withdrew the stilet, but no urine escaped. Finding the stilet useless I withdrew the catheter, and having washed away the coagula reintroduced it, but still no urine passed. Feeling disinclined to withdraw the catheter again, on account of the difficulty experienced in passing it, and having received no instructions as to the means of removing the coagula whilst the catheter was in the bladder, excepting with the stilet, which I had found useless, I was for some minutes at a loss to know how to proceed. It then occurred to me that the introduction of warm water might be useful; but the question was, how was it to be effected? I did not think of the stomach-pump, as at that time I had never seen one. It was not then, as it now is, in the possession of almost every surgeon. It struck me, however, that a common male syringe would answer my purpose, and on inquiry I found there was one in the house of the patient. Having filled the syringe with tepid water, and introduced its point into the catheter, I injected the water through the tube into the bladder. The effect was immediate and satisfactory, and such has invariably been the result in every case in which I have subsequently adopted the same means. A more convenient instrument may, doubtless, be formed, either of metal or India-rubber, but I should use the four-drachm male syringe (or some instrument similarly constructed) in preference to the stomach-pump, as used by Mr. Denton, and for the following, among other reasons:—

First, because, whilst it is equally efficient, it will hold as much water as is necessary, and may be used with as much force as may be required; it is also more simple in its construction and in its application.

Secondly, because it is more portable.

Thirdly, because it requires no assistant, as it may be used with two fingers and a thumb of one hand, whilst the other hand is

engaged in keeping it and the catheter steady and in contact; and

Fourthly, because by putting the point of it through a piece of India-rubber, leather, cork, or any similar substance, of about the size of a sixpence, and of sufficient thickness, previous to its introduction into the catheter, it may be used with a catheter of *any* size or shape, and consequently is more generally useful than an instrument that will fit only one catheter. It is an instrument, too, which may frequently be met with at the house of a patient when the stomach-pump may be some miles distant, and in that case much time and suffering may be saved. The stomach-pump, or any instrument similarly constructed, appears to me to be a more complicated piece of machinery than is necessary for the performance of so simple an operation.

On referring to the letter of Mr. Francis Bush, of Frome, in THE LANCET, of December 15, 1838, which is alluded to by Mr. Denton, I cannot coincide in opinion with the latter gentleman as to the risk of the solder getting out of the catheter into the bladder, provided Mr. Bush's suggestions be attended to. Mr. Bush's plan may not in every case succeed, but it is certainly free from the objection stated by Mr. Denton. I am inclined to think that more risk would be incurred by the sudden introduction of a stomach-pumpful of water into a bladder already over distended by urine; and that the risk would not be lessened by the action of the valve of the stomach-pump, and the time which may be occupied in disengaging the pipe. A rupture of the bladder could not easily be remedied. I have found about one drachm more of water than enough to fill the catheter, quite sufficient to remove the coagula, and it is probable that the compression of the air, alone, which the catheter always contains when it is otherwise empty, would in many cases accomplish the object. I remain, Sir, your obedient servant,

J. LAMPARD, Surgeon.

Warminster, Wilts,
Nov. 2, 1842.

P. S.—The stilet may be easily so constructed, for the space of about two inches from the handle, as to be used, *when necessary* as a *piston*, by the alternate movements of which expulsion and suction may be performed. The catheter would thus be converted into an imperfect kind of syringe, but sufficiently perfect for the purpose of clearing the apertures from coagula. Care should be taken, however, that the catheter be fairly introduced into the bladder before the piston is made to perform the act of suction; and perhaps a hole through the piston, which may be stopped with the finger or thumb when necessary would be of service. In the absence of such a contrivance and the common male syringe, a temporary piston may on an emergency be made in five minutes with an eyed probe and cotton, sponge, or other material.

LANCING THE GUMS IN STRIDULOUS CONVULSIONS.

To the Editor.—Sir,—Nearly four months ago you published a statement of mine describing the treatment adopted by Dr. Marshall Hall in a case of stridulous convulsions occurring in one of my children. You also published a former statement in which I endeavoured to show that nearly all my children had been affected, more or less, with the same complaint, which had baffled the skill of all the medical men whom I had consulted on the subject, and had proved fatal to three of my family.

The means resorted to by Dr. Hall in my last child were fully explained by himself in THE LANCET of the 9th July, and since commented upon by several correspondents, and, in particular, the frequent lancing of the gums. I cannot discuss the subject with professional men, but for the benefit of other children who may be afflicted like mine, I think it right to make known that the plan proposed by Dr. Hall has been persevered in with the child up to the present time (altogether during six months), and with eminent success. The child has had no return whatever of the crowing spasms, has grown healthy, has a mouthful of teeth, runs alone, and though not a large or robust child, is everything else we could wish. He is still supported entirely at the breast; the gums continue to be lanced occasionally, and though the operation is always accompanied with cries, smiles soon follow, showing that the inconvenience is but temporary, and, with all affection for my children, I would rather have his gums lanced every day of his infantile life, than expose him to a return of one of those dreadful spasms and destructive convulsions which I have so often unhappily witnessed as the result of the complaint in question, and I am happy to express my gratitude to Dr. Hall for having found a successful mode of treatment for that which I had been led to believe, and experience had almost convinced me, was irremediable. I am, Sir, your obedient servant,

W. H. GREY.

South Lambeth, Nov. 1, 1842.

THERE has ever been an invisible church of true physicians who have continued faithful to nature, have acted under her direction, who have all thought and meant the same thing, who will be understood throughout all ages, and in spite of the confusion of tongues. Such men are Hippocrates, Œtius, Aræteus, Baglivi, Sydenham, Huxham, Boerhaave, and Frank.—*Hufeland.*

REPLY TO DR. SHEARMAN'S OBJECTIONS TO PHRENOLOGY.

Mr. E. J. Hytche addressed to us last month a criticism on the portion of Dr. Shearman's introductory lecture at the Charing-cross Hospital (page 54), relating to phrenology, which we have not before had room to notice, and now not having space to devote to a new controversy on the subject, we give only a summary of his observations. He says that he finds in the learned lecturer's remarks, instead of any novel physiological objections, or arguments which would be consonant with the character of a *medical* lecturer, only a series of metaphysical criticisms, accompanied by assertions in place of facts. The time was, he continues, when we heard nothing in opposition to phrenology that did not relate to the frontal sinus, the thickness of integument, and the occasional inequality in the tables of the skull; but, as candid opponents have abandoned those objections as untenable, we are about to enter on the second stage of the controversy, the *metaphysical*. He proceeds thus:—

Dr. Shearman tacitly admits that the brain is the organ of the mind. His opposition is chiefly directed against that principle which intimates that the brain is a congeries of organs, each eliminating a special faculty. But although denying this doctrine *in toto*, he furnishes no reasons for his opinion. Had the advocates of the doctrine given no reasons for *their* opinion, or not appealed to authenticated facts, then a mere counter-assertion would have been as valuable as their statement. But the phrenologist has pointed to the phases in human character, to the high development of particular faculties, and the insignificance of others, and to the phenomena of partial insanity. As regards the localisation of faculties, casts may be adduced which prove that the mental manifestations in a healthy brain accord with the development of specific regions. Nor is this all: pathological cases abound which evince that morbid thoughts have coincided with the disease of specific organs. One such case is attested by Dr. Silliman, of America. Sir Robert Liston was noticeable for his benevolence and serenity; but previously to his death a great change occurred; he became very irritable, and his language frantic, whilst his intellect displayed its usual acuteness. After death, although the frontal lobe was found unimpaired, the organs of language and combativeness were diseased. I submit, then, that before we are required to renounce the doctrine, the fallacy of our deductions must be shown. Dr. Shearman has not proved that our evidence is incomplete. We adduce reasons, we ask for reasons against it, but the doctor supplies us with assertions only. But he says that "some instincts are temporary, such as the love of offspring in the lower animals;" and he asks, "How is it that by-and-by the instinct entirely vanishes?" But the inaction of a faculty does not prove its non-existence. A limb, though unused, may not be dead. So every cerebral organ slumbers, until excited into activity. Because mentalisation ceases during sleep, the mental organs have not "vanished." Man exhibits different faculties prominently at different stages of his existence. The boy delights in animal vigour; the aged man loves quiet. So the *lad* observes most, and the *man* thinks most. The action of other organs shows that man's place in society is provided for by the *specific* development of the cerebral organs.

Dr. Shearman considers phrenology useless,—therefore, doubtlessly, worthless. But the present inutility does not argue future inutility, and most assuredly not worthlessness. The Egyptians' study of the planets may have been thought useless, because the objector could not foresee the future events of navigation. It is, then, the truth, and not the advantages, of a science which we should consider.

Dr. Shearman says, that if we wish to eradicate an evil propensity, we do not at once operate on the brain; and he adds, that the utility of phrenology would be shown "if the organs could be diminished by manipulations applied to the scalp." Like all other educationists, phrenologists apply *moral* means to train the faculties. The preliminary step in education consists in learning the faculties of man, and thus knowing what there is to train. Phrenology furnishes this information, and affords a clue both to the nature of the faculties which exist in a particular brain, and to the degree of their development. Thus it is of the highest utility; and if the science be true, who can doubt its utility in the classification of prisoners, the selection ot jailors, the treatment of lunacy? Visit the Hanwell Lunatic Asylum, and learn that it has done much there to meliorate the condition of its inmates. Listen to Captain Maconochie, who tells the world that through measures suggested by phrenology alone, he has curbed the animalism of, and re-humanised, the convicts of Norfolk Island.

Dr. Shearman, finally, assumes a connection to exist between phrenology and materialism. But phrenologists are not materialists because they say that in this life mind is evolved by cerebral operations alone; nor are physiologists amenable to the same charge, because they affirm that taste, feeling, and sight, depend on certain appropriate nerves. Dr. Shearman himself says, that the brain is the medium of communication between internal and external things, "by means of which organ the various attributes of mind are displayed." The phrenologist says no more. Then the doctor and he are equally "materialists." But a negation to

the charge is implied in the very first principle of phrenology, which says that "the brain is the *organ* of the mind." No stronger acknowledgment of an immaterial essence could be made. In conformity with this principle has been the teaching of Gall, Spurzheim, and Combe. But they have not discussed the nature of the soul, because it is impalpable to vision, and within the reach only of assumptive argument.

Brunswick-terrace, Islington,
Oct., 1842.

RECENT OPERATIONS FOR STONE AT KING'S COLLEGE HOSPITAL.

SIR,—As the subject of operations in the hospitals is of importance (both from its connection with the welfare of the poor, who place themselves under the surgeons of the hospitals, with full confidence that those surgeons have been selected from their superior talent and skill, and with reference to a question in operative surgery, which it would seem is not yet determined), I trust that you will permit me to add in THE LANCET a few observations to my former letter on Mr. Fergusson's late stone operations, in reply to the defence of them in THE LANCET for Oct. 29th.

This defence is not without ingenuity, and might impress the cursory reader at first with the idea that I had been too precipitate in my strictures, and that the case of lithotrity was highly fortunate (the man being restored to high health and spirits), and that the female patient must have been greatly benefitted, as she expresses "much gratitude." Whether the reporter would not himself have "shown more wisdom" by adopting a different style of defence, and endeavouring to conciliate the reader by a humble and ingenuous admission of error, the reader will judge by the sequel.

Although the cases were not "finished," there was enough of their history published (and perfectly independent of any termination, fortunate or unfortunate), to call for animadversion; and one of the very objects of drawing attention to

The Case of Lithotrity

was to prevent Mr. Fergusson from "finishing" it. This case is further reported up to the 17th inst. *Another* operation has been performed, but still no cure has been made. When are these operations to terminate? Paring calculi is not so harmless a business as paring corns. Every operation is dangerous, and death has repeatedly ensued from the irritation caused by a single operation. But the patient, we are told, expresses himself "relieved to a degree that he could not have anticipated." His expectation, I presume, as the bladder and other connected viscera were healthy, was that he should be perfectly relieved, or, in other words, cured by one, or at most two, operations. Had he, indeed, read Mr. Fergusson's paper on Lithotrity in the "Edinburgh Med. Journal" for October, 1838, he would have had no such expectation, but we can hardly think that, after perusing it, he should be willing to furnish another proof in his own person of the justice of Mr. Fergusson's condemnation of this plan of treatment.

"His life," the reporter informs us, "is now one of comfort," whilst previously to his admission into the hospital "he was worn down with suffering." Does the reporter really think that any one will believe that the repeated operation of breaking a rounded and perhaps smooth stone into a number of angular fragments, and leaving them in the bladder, is likely to add to the comfort and ease of a patient. Or that his comparative comfort, admitting that he enjoys this, is to be ascribed to such operations, and not to the quiet and other favourable circumstances attending a residence in an hospital? Let him return to his former laborious life, and the difference will soon be manifest between the sufferers from one smooth stone and several angular ones. This description, by the way, of "his being worn down by suffering," is scarcely compatible with the reporter's former statement of his condition on entering the hospital, viz., that he was "a stout and very robust man, of a florid complexion." Such a contradiction is not eminently calculated to win our belief to other more important statements in this defence.

We are told that "there is every prospect of a complete cure." Statistical facts, the only sure ground on which to build our calculation of such chances, oppose such a belief. What does Mr. Fergusson himself state in the paper referred to on the subject, in giving the history of eighteen cases of lithotrity which he had known. "Six were cured; seven were not cured; five died;" "two only of the eighteen cases were attended with happy success." What does Dr. Willis advise, who has bestowed so much praiseworthy pains in exposing the false statements that have been made upon this subject, and in collecting valuable statistical information, upon which he grounds his advice?

"No second, certainly no third operation ought ever to be completed. If *the patient who has had lithotrity performed upon him is not relieved at once, he is in imminent danger of losing his life.*"—*Willis on Stone*, p. 124.

This poor man may recover; he may prove the exception; yet not the more credit will attach to Mr. Fergusson for preaching one thing (of the truth of which he had such assurance) and practising another. But Mr. Fergusson it would appear, is the inventor of a substitute for the screw in the lithon-

triptor, viz., the rack and pinion. *Tweedledum* instead of *tweedle-dee*. But there is no reason why this should be displayed on hospital patients. He must not combine the renown of conferring "a great boon upon true science" (see *Willis on Stone*, p. 109,) by his exposure of the perilous character of lithotrity, with the reputation of being himself a successful lithotritist. He may wish to eat his pie and have it too.

The Operation on the Female,

by dilatation, or laceration, is defended on the plea that the uterus was prolapsed, and I am blamed for not adverting to this. I am, indeed, blameworthy for having neglected to do so, for, under such circumstances, I ought to have expressed myself in stronger terms of a mode of cure so likely to be followed by such disastrous consequences. The chance, nay, the certainty, of the urine running constantly over the prolapsed uterus, and exciting irritation in it, must make a dreadful complication of disease. Yet, like the poor male patient, "in a state of comfort," this unfortunate creatnre is represented as being "most grateful for the relief from the calculus." It is to be more hoped than expected that this feeling will continue when she returns to society, and attempts to fulfil its offices in her deplorable state, and learns, moreover, that the stone might have been removed by other modes, not likely to be followed by such a consequence. But I am accused of too hastily concluding that she will be probably afflicted with incontinence of urine during life. In my vindication I refer to the report of the case. We are told that there was often complete power of retention, some days after the operation. We are *now* told that there was *once* retention for two hours. But the final report, a week after this, informs us that she "has no command over the bladder; there is total incontinence of urine." I wish sincerely that the bladder may regain its power of retention, but experience forbids the indulgence of such a hope. If this should be the happy result, not the less (because the case is an exception) is the practice to be condemned.

The reporter knows nothing, he says, of the more natural procedure by slow dilatation. He must carry his researches farther than the writings and operations of Mr. Fergusson. In the very first case in which this plan was adopted (Medico-Chirurgical Transactions, vol. i.), Mr. Thomas was employed during twelve hours in dilating the urethra to the extent only necessary to permit the insertion of the forefinger, whereas, in the case now engaging our attention, dilatation or laceration was effected in two hours *precisely* (the reporter *now* says more than two hours), sufficient time for extracting a stone of the size of a large chesnut. That this could have been accomplished without excessive pain, I cannot believe. That it would contradict all experience. But I will concede that dilatation to so great an extent might have been followed by paralysis of the neck of the bladder, howsoever effected, although such a result would be by no means so likely after slow as after rapid dilatation. Mr. Fergusson would have done better in reapplying his lithontriptor (for this anti-lithotrity writer commenced operations on the female, as well as on the male, by an attempt at lithotrity) after the dilatation had been carried to such an extent as to admit of the easy application of an efficient instrument of this description.

Altogether, these operations, and the monstrous case of retention of urine commented upon at the same time in my former letter, and for which there has wisely been no defence attempted, furnish a humiliating specimen of surgery as practised in the metropolitan hospitals; and prove, as far as respects the individuals concerned, the justice of the observations in relation to the hospitals of London contained in the leading articles of the two last numbers of THE LANCET. I am, Sir, your obedient servant,

CHIRURGUS.

October 30, 1842.

*** In reply to inquiries on the subject, our reporter informs us that the woman with calculus was "discharged from the King's College Hospital on the 3rd instant, at her own request, and that she is now able to retain her water 'during the entire day,' and that when furnished with a pessary to control the prolapsus uteri, she may consider herself to be cured."

HARD UP FOR A SUBJECT.

WHEN next Mr. Joseph Miller stands in need of an illustration under this head, he may appropriately quote Roderick's leader of Oct. 28, 1842. Take an illustration from page 152, column 2:—"Singularly enough, it appears that *night-soil*, in London, does not pay for half the expense of removal by cartage. In Edinburgh, a large proportion of the contents of the sinks, drains, and privies, is employed in irrigating the neighbouring meadows. It has decupled the value of the land, but is obviously injurious in the neighbourhood of a large town. The parties interested claim a vested right in the nuisance, and offer to discontinue the practice for a compensation of 150,000*l*."—If Mr. Miller see not the "force of the joke" in a moment, he may add the following extract from Roderick's advertisement in the last "Edinburgh Review":—"The London Medical Gazette, a Weekly Journal of Medicine, &c. Volumes for 1842-43, will contain (amongst other sundry matters) leading articles on *interesting topics*."

DISLOCATION OF THE FEMUR IN A CHILD.

I never met with a similar case in practice to the following, neither am I aware that such a one has been noticed by any medical authority. A fine boy, three years old, dislocated the femur upwards and backwards. The child was on the lap of a servant outside a jaunting car; at the falling of the horse, she threw herself off, and pulled her charge with violence to the ground. I found the boy with inverted knee and foot, swollen buttock, and the limb shortened two and a half inches. I grasped the ankles with my left hand, my right finger being placed on the hip to observe trochanteric changes. During a gentle act of extension, in which I turned the foot directly forward, my fingers maintaining a scrutinising pressure on the hip-joint, where a solid fulness existed, I felt an obscure rubbing motion, which terminated in a sudden snap. The extremity was instantly restored to its natural length and form. Three months have now elapsed, and the articulation remains free from ill consequences.

Those who reason from the structure of the hip-joint at so early a period, may deny the possibility of dislocation, and surmise that the accident was one of separated epiphysis, or fracture of the femur in a high situation. But the symptoms, the snapping, the immediate restoration to natural form, and the rapid recovery, oppose such an opinion.

As liability to such displacement must henceforward be allowed, it may be one of common occurrence, and some of the celebrity of certain bone-setters may be attributable to their address in an accident which regular practitioners are not prepared to encounter, by pre-conceived notions of articular non-liability to such a luxation.—*Mr. Kirby, in Dub. Med. Press*, Oct. 26.

FAVUS CONFERTUS.

Countless, almost, are the means recommended for setting up a new action in the scalp in all cases of favus. Of all the applications the iodide of sulphur, the sulphuret of potassium, and the carbonate of potass, are incomparably the best. The former should be employed in the proportion of ten grains, or a scruple, to the ounce of lard. If the ointment be of a greater strength than this, it is very apt to give rise to an eczematous affection of the scalp, by irritating it too powerfully; it may be used twice a-day. Active as this preparation undoubtedly is, it occasionally fails, especially in chronic cases of the disease, occurring in a scrofulous subject. We confess that we have seen no local application comparable to this.—*Med. Chir. Rev.*, Oct.

DR. HOEFER AND M. DUMAS ON

"THE MYSTERIOUS CIRCLE OF ORGANIC LIFE."

"In fact we have ascertained by the result of every kind of evidence, that animals do not create true organic matter, but that they destroy it; whilst plants, on the contrary, habitually create the same matter, and destroy but little thereof, and that only for particular and determinate purposes.

"Thus the grand laboratory of organic life resides in the vegetable kingdom; it is there that vegetable and animal matters are formed, and at the expense of the atmosphere.

"Vegetable matter passes ready formed into herbivorous animals, who destroy a portion, and accumulate the remainder in their tissues.

"Herbivorous animals pass ready formed into carnivorous animals, who destroy or preserve them according to their wants.

"Lastly, during the life of animals, or after death, these organic matters, gradually destroyed, return to the atmosphere whence they were derived."

Thus (says Dumas, after making the above extract from Hoefer's "Histoire de la Chimie,") closes the mysterious circle of organic life on the surface of the globe. The atmosphere contains or engenders the oxidated products, carbonic acid, water, azotic acid, oxide of ammonium. Plants, true apparatus of reduction, separate their radicals, carbon, hydrogen, azote, ammonium. With these radicals they form all the organic or organisable matter which they yield to animals. These, in their turn, true apparatus of combustion, reproduce by their action carbonic acid, water, oxide of ammonium, and azotic acid, which return to the air in order to reproduce anew, through revolving centuries, the same phenomena.

And if to this tableau, already so striking on account of its simplicity and grandeur, we add the undisputed part which is enacted by solar light, the only power capable of setting in motion this immense machinery—machinery unto the present moment inimitable—that the vegetable kingdom constitutes, and is the means whereby is effected, the reduction of the oxidated products of the air, we shall be struck with the meaning of these words of Lavoisier:—

"Organisation, feeling, spontaneous motion, life itself, exist only on the surface of the earth, and in places exposed to light. We may say that the fabled Promethean torch was the expression of a philosophic truth which had not escaped the ancients. Without light, nature was without life; she was dead and inanimate; a beneficent God, in creating light, spread over the earth organisation, feeling, and thought."

These words are as true as they are beautiful. If sensation and thought, if the most

noble faculties of the soul and of intelligence, need a material covering in order to manifest themselves, it must be that plants are charged to weave the woof of such covering, with the elements which they borrow from the air, and under the influence of that light which the sun, its inextinguishable source, pours constantly and in torrents on the surface of the globe.

MILD MERCURIAL FRICTION.

It is a common practice with persons in a certain class of life to apply to quacks for the cure of venereal disease, which often subjects them to a complicated set of effects extremely difficult to eradicate. If the patient has been quickly salivated, and is of a scrofulous habit, the difficulty is much increased. In these cases I have found the slow and cautious introduction of mercury by friction a more effectual mode of removing the train of distressing symptoms which follow a mistreated case, than any other plan of treatment.

For instance, P. F. contracted a chancre, and was very quickly salivated, and apparently cured. Several years after, I was again desired to visit him, when his state was deplorable; exfoliations of bone had taken place in the skull, arms, and legs, the abdomen was greatly distended, partly with fluid, and partly tympanitic. All hopes of cure had long since been abandoned, and he sought relief from large doses of opium. Ten grains of mercurial ointment were carefully and slowly rubbed into the thighs every night, and five drops of Fowler's arsenical solution given three times a-day. The good effects were soon apparent; in ten days the abdomen was reduced five inches, and by perseverance in this plan for six weeks, with a milk diet, all the wounds healed, and he so perfectly recovered that he shortly afterwards married.

In another case, the patient, a surgeon, had, from time to time, taken, first, small doses of the oxymuriate of mercury in sarsaparilla; then a regular course of mercury in the usual way; then had daily application of lunar caustic to the sore and surrounding parts, with tonics; then fumigation of the throat with cinnabar; while a fourth surgeon, who stood at the head of the profession, assured him that his cure would be effected by Velno's vegetable syrup. All this in vain; he had abandoned himself to die. I earnestly entreated him to rub in very small quantities of mercurial ointment, and in one week he derived benefit from its use. The pains gradually abated, he got sleep, the sore healed, his strength returned, and in six weeks he resumed his practice.

In a third case I recommended, also, very mild mercurial friction. To this, however, the friends objected, partly on account of his being of a scrofulous habit, but chiefly in consequence of two deservedly eminent surgeons, who had stated that such a course would in all probability be fatal. So confidently, however, did I anticipate a different result, that I urged him to adopt the plan, and by steadily persevering in it for six weeks he was completely restored to health. I have witnessed several similar cases so treated, and with the same success.—*Mr. Toogood, Prov. Jour.*, Oct. 15.

THE TREATMENT OF PNEUMONIA IN GUY'S HOSPITAL.

THE PURE ANTIMONIAL CURE.

No one mode of treatment should be adopted in pneumonia. To say that venesection, twice or thrice repeated, or antimony, or calomel and opium, should always be the remedy, would be dangerous in practice. If the disease existed always in persons of the same habits, country, and locality; was always presented in the same stage, uncomplicated (and so on), then one treatment might be adopted with advantage; and tables, showing the cures and deaths, from one or the other mode, might be trusted as guides. But each case should be more or less studied by itself. I shall presently have to recommend moderate venesection, followed by calomel, opium, and antimony; but a young man was admitted into Guy's hospital a few weeks ago suffering from pneumonia, passing to the second stage; no indication of tubercles could be discovered; he had no typhoid symptoms; but he was so feeble that bleeding would have killed him, or antimony would, I believe, have extinguished life. He was treated for the first twenty-four hours with ammonia; after which he was ordered in a pill,—two grains of blue-pill, two of extract of hyoscyamus, and one of ipecacuanha,—and a draught, composed of ten minims of liquor potassæ and an ounce and a half of decoction of bark, every six hours; a blister to the side, and mild nutritious diet. It is true that a few days after, when he had improved in power, he was put upon calomel and opium, and antimony; but these were withdrawn in two days. He then had merely a little saline medicine, followed by quinine; blisters to the affected side were several times repeated during the period, and he left the hospital in a few weeks, cured of his inflammatory complaint, though still weak. He will probably ultimately die of phthisis.

In the average of cases in this hospital a considerably larger proportion of those who were bled recovered, than of those who were not. But that venesection is therefore advantageous in pneumonia, abstractedly considered, could not be fairly supported, as

venesection was, I believe, practised in *all cases*, excepting in those who were already too much debilitated, or too slightly affected.

The plan for many years generally adopted in Guy's Hospital, in acute pneumonia, has been to bleed the patient to approaching syncope, and to administer a pill, containing half a grain of opium, and a quarter of a grain of tartarised antimony, with one or two grains of calomel, every three, four, or six hours, according to the severity of the symptoms, usually combined with a saline mixture, containing twenty or thirty minims of antimonial wine. If, in a few hours, or next day, the general symptoms have been unsubdued, or have returned, venesection has been repeated. It has sometimes been necessary to bleed again and again. Triple venesections have been uncommon, and a fourth very rare. If the general symptoms, on the contrary, have been reduced, though the local affection has continued severe, or if the patient's power has been materially diminished by venesection, cupping has been ordered, to from six to twelve ounces. On a decrease of the disease, the medicines have been less frequently repeated, or stopped, even though the mercury has not affected the mouth. If the system has evidently become affected thereby, but the complaint is still active, it has usually been discontinued, or repeated only in small unfrequent doses. Blisters also have been applied with good effect in the latter stages. The utility of the latter remedies has been doubted; but I state my thorough conviction of benefit being derived therefrom, in very many instances. The foregoing treatment has been, on the whole, so efficient that no important change has been considered justifiable.

I have frequently been desirous of trying the pure antimonial, or contra-stimulant, treatment; but in so important a disease I have not felt justified in discarding means which have so often effected a cure. I must, however, confess that the results of the treatment of pneumonia in Guy's Hospital—if all cases, however advanced, and however complicated, be taken into account—are not to be compared with what are stated to have been the "triumphant" effects of antimony. Thus Laennec says, that of 62 cases treated by antimony, only 6 died, two being moribund on admission, two old men of seventy, with cerebral congestion and pleurisy, and the sixth under disease of the heart. Others are reported to have lost only 1 in 30 and 1 in 40 cases. However, my observation is entirely opposed to Laennec, when he states that he has never known the disease renewed when antimony had effected amelioration. In the Infirmary of Edinburgh, while I was a pupil there, a patient, after two venesections, leeches, and continued antimony, was considered almost convalescent. The antimonial solution was however continued. But when the disease had for four days appeared to be rapidly decreasing, the attack was renewed; and it was necessary again to bleed him to ten ounces, after which he rapidly recovered. The same has certainly happened in several cases that have fallen under my notice. In some instances, also, when antimony has been at first employed with benefit, but relapses have taken place, it has appeared necessary for the cure to administer calomel and opium in combination with it. Nevertheless, I believe antimony to be especially useful in persons who cannot bear the abstraction of blood, and those in which mercury is contra-indicated. In such cases, as in the pneumonia and bronchitis of children after measles, I have occasionally administered it, and with manifest advantage. The patients have, it is true, died from another complaint; but that complaint has been, I have thought, produced by the remedy employed for the pneumonia.

The great authority last quoted considers antimony to be equally efficacious "in any stage of the disease, even after a great portion of the lung has undergone purulent infiltration;" and supposes that it may act by "increasing the activity of *interstitial* absorption." But the well-known action of mercury in promoting the absorption of effused matter, clearly points it out as the medicine especially indicated when there is inflammatory deposit.

From the whole circumstances, I believe that antimony is a very active remedy in pneumonia, more particularly indicated in slight and recent cases, those complicated with bronchitis, and those in which venesection cannot be borne or repeated, and mercury cannot be safely employed; that the cases are often more rapidly relieved by it than by any other means, but that they are also more than ordinarily liable to relapses; and that when consolidation has obviously occurred, it should not be trusted alone, but should always be given with mercury.—*Dr. Hughes, Guy's Hosp. Rep.*, Oct.

NEW PLATINA SALT.

During some investigations of the cyanides of platina and iridium, Mr. Knopp has discovered a very remarkable platina salt. It is procured from the double cyanide of Gmelin, and it also forms a double cyanide with cyanide of potassium. It crystallises in fine prisms, distinguished by their cupreous lustre, exactly resembling metallic copper. Under the microscope, however, the transparency of the crystals becomes apparent; they are tinged by a pale green colour, easily soluble in water, forming a colourless solution. This salt has also been discovered by Professor Erdmann, as we learn from a private letter.—*Liebig's Annalen.*

PRIORITY OF AUTHORS OF THEORIES.

Thales, the chief of the Ionian school, was born six hundred and forty years before Christ, at Milesia. He incessantly inquired, "How and for what purpose does every thing exist? Whence came it, and whence departs?" Vast were these inquiries. They embraced every science, and were the very aim and object of all knowledge.

"*Water* has produced every thing. Plants and animals are only water condensed under different forms; to water they will be reduced." Such was Thales' reply. By substituting *air* for water, we have the reply of Anaximenes, and other philosophers of the same school. Twenty-four centuries now separate us from Thales; and yet what are the eloquent words of one of the most celebrated chemists of modern times, Dumas, in his "Essai Statique," page 2 (a second and enlarged edition of whose valuable work has just appeared in Paris)? "Plants, animals, man, contain matter. Whence comes it? What part does it enact in their tissues and the liquids which bathe them? Or whither does it depart when death breaks the bonds by which its different parts were so closely united? Plants and animals come, then, from the air, and are only that air condensed. They come from the air, and thither return. They are the true dependants on the atmosphere." "Far be it from me," observes Dr. Hoefer, in his 'History of Chemistry,' "to adduce by this the insignificant question of priority. There is contained in these remarks of Dumas something more elevated—the universal law which presides at the conception of all theories. The ancients, poor indeed as to *facts* observed, formed theories which astonish us by their boldness; and, in modern times, when we are richer in facts, we observe systems raised, which have for their object merely the reproduction of doctrines as old as human kind; inherent to the very intelligence of mankind, or simple phantasms of the mind, always reproduced under the same forms, when man ponders on subjects which thought alone can properly conceive, but which direct experiment never demonstrates. Such is the inextricable position into which we inevitably plunge when our pursuit is the history of science."

SPEEDY CURE OF HOUSEMAID'S KNEE.

A very healthy girl, aged twenty-one years, was admitted into the City of Dublin Hospital June 1st, with this affection. The swelling commenced three months ago, and now is globular, prominent, and circumscribed, considerably interfering with the functions of the joint. After taking colocynth and hyoscyamus, on the 8th she submitted to the following operation:—An incision one-eighth of an inch long, was made along the outer margin of the tumour; then a very small bistoury was introduced obliquely into the cyst, at such a distance from the superficial cutaneous incision as prevented the escape of the fluid. The sac was then cut in several places, chiefly on the anterior surface, and the instrument withdrawn, all the fluid having been evacuated. A small compress was then applied, and several straps of adhesive plaster, and a roller which extended from the toes to the knee. A splint was also applied, which extended from the middle of the back part of the thigh to the same point of the leg. 10. Dressings removed; considerable diminution of swelling. Straps of adhesive plaster again applied, nearly as recommended by Baynton. No constitutional disturbance. 14. Straps quite loose; strong evidence of subsidence of swelling. 17. Nearly restored.

Although my colleague, Mr. Williams, has shown the advantage of this line of treatment, I give the case publicity, in hope that this practice will become more general, as many practitioners are still apprehensive of sinister effects following it. If the incision, or, rather, the puncture into the sac, be made with care, the internal surface of the cyst then cautiously scored after it, and the fluid evacuated by firm pressure, so as to prevent the ingress of air into the cavity, no danger need be apprehended of unpleasant effects succeeding to this measure. We all recollect the time formerly occupied in attempting the removal of such swellings by discutient applications, vesicatories, and such means of resolution. The only instances in which the subcutaneous incision might fail, are those where the sac is much thickened, its interior lobulated, and the cells filled with a thick gelatiniform substance; still, in such instances, it is a means which should be kept in view.—*Mr. Hargrave, in Dub. Med. Press*, Oct. 26.

THE TUB-AND-SHOWER-BATH HOUSES.

At one of the "hydropathic establishments" the charges are made by the "surgeon" at the following modest rate—a sample, probably, of the whole class:—"Persons anxious to ascertain if their cases are fit for hydropathic treatment. Terms:—for consultation, half-a-guinea; for ditto in the country, according to the *distance of the journey* (!) The whole of the treatment, with board and lodging, three and four guineas per week, according to the accommodation and the *nature* of the disease." Of course the quack advertises that he "prefers to undertake the case of persons who are willing to reside at the establishment, opposed as is the treatment to the general ideas of servants and attendants."

THE

TREATMENT OF INSANE PERSONS WITHOUT BRUTAL RESTRAINT.*

To the Editor.—Sir, In THE LANCET for July 2, 1842, appeared a letter, requesting to know the modes adopted by the non-restraintists in the cases of—

1. Furious maniacs.
2. Melancholics, with a great tendency to suicide.
3. Patients who obstinately refuse food.

I had hoped that some one would answer these questions, but with surprise I find only a recommendation to visit the asylums of Hanwell, Lincoln, Northampton, and Glasgow, although more satisfactory replies your correspondent had a right to expect, for his questions were put in a proper spirit, and may have emanated from a gentleman who has experienced some difficulty in adopting the system of non-restraint. With regard to the third question, should my avocations permit it, I will on another occasion endeavour to convey to your correspondent such information as I have gained respecting the modes of treating those who obstinately refuse food. At present I must refer to two of the questions only.

I have on various occasions visited some of the largest institutions in this country where the patients are treated without recourse to mechanical coercion, and shall, therefore, endeavour to explain (without advocating) the modes adopted in those establishments.

1. *Furious maniacs*, when in a state of excitement, are in some establishments surrounded by attendants who firmly and steadily secure the limbs until the paroxysm has abated. In others, and it is the practice most generally adopted, the patient is conveyed to his room, and secluded until the tendency to violence has abated. The same plan is not, of course, adopted in all cases. It is sometimes found beneficial to carry the patient to the shower-bath, or to administer medicines before placing him in his room. These are the means usually employed to prevent acts of violence to others, in the maniac. When the patient is liable to injure himself by striking his person against the walls of his apartment, he is placed in a room cushioned on every side, in such a manner as to prevent any injury arising from his restlessness. In addition to these methods of preventing injury during a paroxysm, much watchfulness is exercised to detect the first rising of excitement, and means are judiciously applied to allay it. The causes of excitement are investigated, and, when ascertained, suitable expedients are put in force to prevent its occurrence.

2. *Melancholics* with a great tendency to suicide, are placed under a constant watch, both night and day. Efforts are, of course, made to overcome the tendency, and to create a more cheerful frame of mind, by means of exercise in the open air, suitable occupation, a liberal diet, and great attention to the digestive and excretive functions. In particular cases, where the patient can be made sensible to shame, its influence is put in operation, and in other cases a beneficial effect has arisen from the power of ridicule over the mind. But there are, of course, moral means used. I know of no substitute for the mechanical, excepting the constant watchfulness of an attendant. There are cases where the suicidal propensity exists, but not in a degree that requires the constant surveillance of a watch. The precautions adopted towards them are to provide them with clothing so made that it cannot be torn, to place them in apartments where they cannot have the means of suspension, and to carefully keep from them all sharp instruments.

This is a brief, and, I am conscious, a very imperfect sketch, of the modes adopted towards maniacal and suicidal cases by those gentlemen who are endeavouring to abolish the use of mechanical restraint in the treatment of the insane. I am, Sir, yours, &c.

G. L.

Nov. 1, 1842.

* The term "non-restraint" is both awkward and incorrect, as a means of designating the humane system of treating insanity. Until a better is suggested, that mode may be more correctly and characteristically indicated by the expression which we have here supplied.—LANCET.

THE PASSIVE RESTRAINT OF LUNATICS.—A letter was addressed to us on the 2nd inst. by Mr. R. G. Hill, late house-surgeon of the Lincoln Asylum, criticising a speech of Mr. Pownall, one of the Middlesex magistrates, reported in the *Times* of October 28, in which Mr. P. mentioned the passive restraint of lunatics as the special system of the *Hanwell* Asylum, as though it was created and first pursued *there*. In contradiction of this claim, Mr. Hill sends us two extracts from the official reports for 1837 and 1838, of the Lincoln Lunatic Asylum, "the birth-place of the abolition of instrumental restraint, which originated," says Mr. Hill, "with myself in that institution. Further," he adds, "my own *brochure*, published by Messrs. Simpkin, in 1839, also establishes this point." Not having room for these extracts we remark here, that although, of course, they do not show Mr. Hill to be the author of the system (for there are pre-claimants), yet they speak of this system as an experiment in the asylum, proposed and employed by Mr. Hill, then for the first time, and as a novelty.

WRITERS on the subjects of what have hitherto been called the *restraint* and the *non-restraint* systems in the care and treatment of the insane, must repeatedly have felt how inadequate and cumbrous were those terms in expressing their views on the subject. We suggest in the notice last before printed, a second term for use with reference to the system of *non-restraint*, viz., the "passive" system. A term for its opposite will be found at page 255 of the present number of THE LANCET. The character of the one species of restraint is brutal, that of the other is passive. Thus they would be severally called by their right names.

THE HAVANNA.

A LETTER, dated Havanna, Sept. 15, 1842, addressed by a lady to a friend in London, contains the following useful information for emigrants to the quarter whence it was written:—

"We have no medical man here in whom we place much confidence, or who even commands personal respect; but although there is an excellent opening for one, on that account, there is not, I believe, a prospect of his obtaining any large practice. Whatever people may think in England, this place is not favourable for medical men in making fortunes. We hear of their acquiring money, but have no proof afforded of the fact; and it is often astonishing to me how they get on at all, as I never knew of any resident requiring their aid. All the practice seems restricted to transients, especially the shipping part of the strangers, and they certainly do their best to put themselves on the doctor's list, and on death's list, too, by working in the sun, and drinking spirits, as in colder climates, and sleeping on the deck, exposed to the night air and the horrible exhalations of the harbour. I have rather underrated the prospects to new comers than otherwise, thinking that the safest plan to pursue, to prevent their disappointment, though we should be glad enough to have the company and friendship of respectable and intelligent gentlemen in the medical profession, fresh from our native country; yet it sometimes seems strange to me how indifferent or philosophically I am beginning to look on the passing events of the day at home. I forget whether it is Bishop Warburton, or Atterbury, that wrote to Lord Bolingbroke in his exile, but it seems quite true that distance has the effect of time, and that one can thus have the opportunity in life of looking on passing events with the eyes of posterity."

By the newspapers we learn that the season at the Havanna had proved extremely unhealthy, and that six of the British merchantmen in that port had lost their commanders, and some of them their entire crews.

DR. R. LEE'S "DIFFICULTIES IN MIDWIFERY."

To the Editor of THE LANCET.

SIR,—In reply to a letter contained in your Journal of Saturday, October the 22nd, to which the name "Blundellulus" was attached, I beg to offer a few remarks.

Your correspondent inquires, in the first place, whether the account given in the "Medical Gazette" for October the 7th, is correct with regard to the number of difficult cases of midwifery which had come under the observation of Dr. Robert Lee during the last fifteen years, viz., a hundred cases of craniotomy, and fifty-five cases in which the forceps were applied.

In reply, I have simply to state that the report was perfectly true, and I would remark, that the practical experience which Dr. Lee has enjoyed, is more than usually falls to the lot of most practitioners. The offices of physician-accoucheur to

The British Lying-in Hospital,
The St. Marylebone Infirmary,
The St. Marylebone Parish,
The Southwark Lying-in Institution,
The Royal Pimlico Dispensary,
The St. George's Lying-in Institution,
The Newman-street Dispensary,

have been fulfilled by him for many years. Independently of these situations, no case of any importance has occurred in the St. James's Parochial Infirmary without his opinion having been consulted, which, together with an extensive private practice, could have afforded no mean opportunities for recourse to instrumental midwifery.

The remarks made by your correspondent apply not only to Dr. Lee, but to many practitioners in London, as, from the "Clinical Midwifery" lately published (which contains the report of the cases alluded to in your Journal), it would appear that the principal cases have been those in which medical men have consulted Dr. Lee, and that the operations performed were done with their concurrence.

In the second place, your correspondent desires that all the records of lying-in hospitals and institutions be searched "for the purpose of ascertaining the proportions of obstetric operations." In answer to which I would ask, To what record does he allude, as I know of no hospital report published in this country?

With regard to the proportions in foreign institutions and the Dublin Lying-in Hospital, I beg to submit the following table from Dr. Lee's last work, "Clinical Midwifery," from which it will appear that during the space of seven years, 118 cases of *craniotomy* occurred at one institution, viz., the Dublin Lying-in Hospital.

Hospitals.	Number of Labours.	Forceps Cases.	Proportion.	Craniotomy Cases.	Proportion.
Dublin—Clarke.....	10199	14	1 in 728	49	1 in 248
Dublin—Collins	16654	27	1 in 617	118	1 in 141
Paris—Baudelocque..	17388	31	1 in 561	6	1 in 2898
Paris—Lachapelle ...	22243	76	1 in 293	12	1 in 1854
Paris—Boivin	20517	96	1 in 214	16	1 in 1282
Vienna—Boer	9589	35	1 in 274	13	1 in 737
Heidelberg—Naegele .	1711	55	1 in 31	1	1 in 1711
Berlin—Kluge	1111	68	1 in 16	6	1 in 185
Dresden—Carus	2549	184	1 in 14	9	1 in 283
Berlin—Siebold	2093	300	1 in 7	1	1 in 2093

In conclusion, I would state, that instead of doubting the opinion, and questioning the practice, of one of the greatest practical accoucheurs of his day, your correspondent ought to be obliged to Dr. Lee for commencing a report of midwifery cases, and to feel indebted for the great practical improvements and physiological discoveries which he has added to the science of midwifery. Reflecting at the same time that, actuated alone by the best feelings, and an earnest wish for improvement, Dr. Lee has published to the world the result both of his successful and his unsuccessful cases, in order that the junior practitioner might benefit by his experience. That it may not be said that I have made assertions which I cannot substantiate, I should feel obliged if "Blundellulus" would point out one case amongst those published in Dr. Lee's Clinical Report, in which treatment has been employed contrary to the strictest obstetric principles. By inserting the above in your Journal, you will greatly oblige your obedient servant,

AN OLD PUPIL OF DR. R. LEE.

St. George's Hospital, Oct. 31, 1842.

MIDDLESEX HOSPITAL.

HÆMATOCELE—TREATMENT BY INCISION.

JOHN DONOVAN, thirty-eight years of age, was sent into the hospital July 19, 1842, supposed to be affected with hydrocele, and on the right side of scrotum was a swelling, the size of a large cocoa-nut, but more ovoid, occupying the usual seat of this disease. The surface of this swelling was uniform, it was tense and resilient, and although on being struck with the fingers of one hand there was communicated to those of the other a thrill like that of fluid, yet it was not so distinct as that of hydrocele usually is. Pain in the swelling was not complained of, yet it was tender on pressure, and the scrotum covering it was of a dark, dusky-red colour. The swelling was not translucent, and the testicle could not be satisfactorily made out; the spermatic cord was free from disease; the countenance was very sallow, and somewhat anxious; his pulse was frequent; he had lost flesh of late. The swelling began twelve months ago, and has since gradually increased in size. It now reaches nearly to his knee, and its weight is a great incumbrance to him.

At the visit on the following day, Mr. Arnott remarked that this was not a case of common hydrocele. The non-translucency of the swelling might, however, depend on a thickened tunica vaginalis, or on its fluid contents being discoloured. On the other hand, it was not usual in simple hydrocele to have the scrotum inflamed, and the man's countenance was like that which attended malignant disease, yet the spermatic cord was in its natural state. There was evidently fluid in the tunica vaginalis, and this might be dark coloured, and the testicle sound; on the other hand, fungus hæmatodes of the testicle with effusion into the tunica vaginalis might exist, a combination which he had seen. He should puncture the swelling in the first instance to determine its nature, and then act accordingly. A common hydrocele trocar being introduced, half an ounce only of dark fluid escaped, and no more could be obtained; yet on introducing a probe through the canula, it passed its whole length into the swelling, and moved about in it without resistance, as in a cavity. Suspecting that something obstructed the canula, a large trocar, such as is used in tapping for ascites, was now introduced by Mr. Arnott, and through its canula about thirty ounces of very dark coloured fluid, or bloody serum, was evacuated. The nature of the case being thus made evident, the further escape of the fluid through the canula was interrupted, and a bistoury being run into the swelling, it was freely laid open to the extent of five inches, giving issue to a further quantity of dark fluid. The tunica vaginalis where divided was now seen to be nearly half an inch thick, and its inner surface lined by layers of fibrine, red, like those of an aneurismal sac, but less solid, with a

looser portion on the innermost surface. A quantity of the last or looser portion was removed. No coagula of blood were present. The testicle in its natural condition was felt at the lower part of the thickened tunica vaginalis. No lint was introduced into the wound, but the house-surgeon was directed to pass a probe between the lips of the wound to prevent their union, and to syringe out the cavity twice daily.

23. The swelling has not much resented the treatment of the 20th. The parts are still very bulky, from the thickness of the tunica vaginalis, which now that inflammation has taken place, is increased to an inch. The discharge is a little offensive, and is not yet purulent. Portions of red fibrine are discharged, when the cavity of the tunica vaginalis is syringed out with tepid water, which is done twice a-day.

August 1. Some slight constitutional disturbance has taken place, but it has easily been controlled by regimen and mild aperients. The discharge is puriform and offensive. The tunica vaginalis is washed out three times daily. There is considerable redness of the scrotum, and as this is pustular, and probably aggravated by the poultices (the water-dressing was disliked), let them be discontinued, and simple dressing and tow be used to absorb the discharge.

4. No more loose fibrinous coagula are discharged with the thin pus, several ounces of which escape daily. The swelling diminished in size.

10. Swelling slowly decreasing in size; opening in the scrotum quite free, and discharging.

Sept. 20. The parts have now gradually got down to the size of a turkey's egg, and through the opening a very trifling discharge takes place. The testicle is felt externally at the lower part of the swelling, and of its natural form and size, distinct from the larger mass of thickened and indurated tunica vaginalis above. The man, who has lost his anxious look, has been up for a week; and as the further diminution of the swelling must necessarily be slow, and little under the influence of medicine, no opposition was made to his request that he might be made an out-patient, in order to resume his work

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HÆMATOCELE OF THE THYROID BODY.

Whilst Donovan, the subject of the preceding case, was in the hospital, an old woman applied as an out-patient who had an enlargement of the thyroid body, the size of a small orange, and in the integuments a fistulous opening, through which a very trifling discharge takes place, not sufficient to irritate the integuments around it, which are puckered and drawn in.

Mr. Arnott stated, that this patient had been in the hospital three years ago, when she presented an instance of hæmatocele of the thyroid body, and as the case is of interest we copy it from the case-book :—

Mary Scully, from county of Longford, in the south of Leinster, ætat. 66, admitted September 3, 1839. She has a bronchocele as large as her head, the left lobe of the thyroid body being by far more enlarged than the right. On the left side it extends beyond the margin of the sterno-mastoid muscle, the fibres of which seem to spread over it. The left carotid artery is displaced, and makes a curve upon it at the posterior part of the left lobe. The superior thyroid artery also lies upon its upper part, and spreads some of its branches over it. There is a groove of division between the two lobes. The tumour feels tolerably firm, but at parts it seems to be composed of cysts; she has been unable to lie on the right side for the last three years, owing to the pressure of the tumour on the larynx, and the sense of suffocation thereby occasioned; her breathing is not otherwise affected by it; she never had pain in it till about two months ago; complains of lightness of the head, to which she has been subject for some time.

She has had the swelling for fourteen years, but it was little more than half as large two years ago. When it first appeared it was not larger than a bean, but was flat on the surface. She can give no tangible reason for its appearance. Nothing was then done to it, and it has gradually increased to its present size. She had no advice for it till about two years ago, when it was lanced in both lobes, and much "blood" came from the right, none from the left. Sir A. Cooper then saw her, and ordered an issue to be made on it, which soon healed; but this did no good, and it continued to increase in size. She then went to Guy's Hospital under Mr. Key, and took medicine without relief; she stayed there three weeks. She was admitted here with injury of the shoulder about three months ago, which was soon cured, but nothing was then done to the swelling.

Sept. 4. Mr. Arnott to-day punctured the left lobe with a trocar and canula, and about ℥viij of grumous fluid were drawn from it, composed apparently of serum mixed with blood (it contained much albumen). Since that it has been easier.

5. To have three grains of iodide of potassium in carraway water three times a-day.

Oct. 7. The swelling was again punctured about a fortnight ago, during Mr. Arnott's absence from town, and only four ounces of dark-coloured fluid drawn off. The iodide to be discontinued, owing to headach and slight fever.

10. The old lady having overheard that it was intended to make a free opening in the swelling, left the hospital without permission.

Scully, on the 29th of the same month, entered the Marylebone Infirmary, where she

came under the care of Mr. Phillips, from whom Mr. A. had learnt that on the night of her entrance, the swelling had burst spontaneously, and it was supposed that three pints of reddish fluid had been discharged, and that the cyst had afterwards suppurated. The progress of the case whilst in the infirmary was related by Mr. Phillips in a paper read before the Medico-Chirurgical Society during the present session, and reported in THE LANCET, p. 521, vol. ii., 1841-42.

Oct. 20, 1842. The swelling of the neck has again somewhat increased in size; at present the enlargement of the thyroid body on the left side, which enlargement is irregularly globular, is of the bulk of an orange; that on the right, in close approximation to it, of a hen's egg. The left carotid artery is in its natural situation; the left superior thyroideal is felt ramifying on the tumour on the side; the fistulous opening in the skin is on the lower edge of the swelling. She suffers little inconvenience from it; but a trifling degree of uneasiness in it, and the alleged slight augmentation in its size, induced her to come again to the hospital. The contrast presented by her present appearance, and that of 1839, when two drawings were taken and preserved, and when there was "a swelling, the size of her head," is very extraordinary.

EFFECTS OF MERCURY ON HORSES.

MR. ATCHERLEY, of Bridgnorth, says, on the 20th of May I attended a two-year-old colt, which two months before was attacked by the distemper. He had distressing cough, and great enlargement of the parotid glands. Blisters had been applied, and other means, to remedy the cough, without any benefit. Then a gentle aloetic aperient was given, after which, hydrarg. chlorid. 3j, cum pulv. opii gr. vij, were administered, morning and night. The diet, mashes of bran and oats, and a little clover hay. On the sixth morning there was soreness of the mouth, increased saliva, the appetite impaired, the bowels relaxed, and a pinky margin round each tooth. I discontinued the medicine, and gave a malt mash twice a-day. In a month after the first mercurial dose, the colt had entirely lost the cough, and the enlarged glands had resumed their natural form. It was a perfectly erroneous opinion, adds Mr. Youatt, editor of the *Veterinarian*, that Professor Coleman imbibed of the uncertain or injurious effect of mercury on the horse. The late experiments of Mr. Percivall prove that the system of this animal can be mercurialized in a much shorter time than is commonly believed, and that, to insure the good effects and beneficial operation of the mineral, it is by no means necessary that any considerable or dangerous salivation should be produced.

THE LANCET.

London, Saturday, November 12, 1842.

WITHIN the last few years the duties of the office of Coroner have been so fully discussed in connection with the study and practice of medicine, that the office seems now to partake more of a medical than of a legal bearing. This result is not to be deplored. It is an approach to truth which must ultimately prove useful to the community, and the correct opinions which are beginning to prevail in the public mind relating to this subject will ultimately place the office of Coroner amongst the most practically useful institutions in this kingdom. Despite all the disadvantages by which it has been surrounded, all the attempts which have been made to render it obnoxious, notwithstanding the repeated denunciations of counsellors, and the sneers and jokes of Judges, the office is still regarded as one of considerable importance by the sound-thinking portion of society. That it has been abused, misused, and injured in a great variety of respects, must be acknowledged. But these defects in the administration of the office, and in the practice of treating it in the superior courts, do not interfere with the inherent principle of its utility. The nature of the office is undeniably good.

The decisions of the Court of Queen's Bench, with reference to the mode in which its duties ought to be discharged, are as thoroughly and positively bad. Against an obnoxious and an ignorant mode of administering the common law, the statute law of EDWARD has had to be continually and obstinately contending.

We shall take upon ourselves the task of illustrating the correctness of the rule which we have here laid down.

It would be useless, and wholly encumbering the subject, to go into the ancient history of this office. Sufficient be it to state that it has existed during many centuries,

and that the precise date of its origin is lost in the obscure pages of antiquity. The office, therefore, may be fairly said to have stood the test of time, in a manner which scarcely admits of a parallel, and the officers who preside in it are still elected by the people.

Before we notice the impertinent efforts which have been made in modern times to detract from the power and utility of the inquest, we could scarcely perform a more useful labour than that of directing the attention of the profession and the public to the objects for which the office was undoubtedly instituted, and to the best means for carrying them into effect.

The two chief motives for establishing that institution must necessarily have been the *prevention* of crime, and the *detection* of crime. During several hundred years after the office of Coroner was instituted, that officer and the sheriffs were the chief conservators of the peace in every county of England. Coroners and sheriffs held the same rank, exercised like powers during periods of public commotion, and both were chosen by the people. The principle duty of the Coroner, however, then, as now, was directed to inquiries relating to deaths which *had* actually occurred, or were *supposed* to have occurred, from criminal or other unusual causes. It is to the discharge of that duty to which we wish more particularly to draw the attention of our readers, because it necessarily points to the two branches of the subject, the *prevention* and the *detection* of crime.

The influence of such an office, when its labours are effectually performed, is indescribable, and cannot be over valued. The office, so conducted, offers a strong shield of protection to the innocent, whilst it presents an instrument of extraordinary terror to the guilty. In the one case it inspires hope and confirms confidence; in the other, it unmasks the midnight murderer, and exhibits his quivering lip to the gaze of his indignant fellow-citizens. In the roving character of the office, also, is to be found one of the chief sources of its usefulness. The operation of inquests is not confined to palaces and mansions, or other high places. It is not restricted to the metropolis, to the cities, to the great towns, or even to the villages, of this kingdom. Wherever a death occurs out of the usual course of nature, there the Coroner is bound to go and inquire, in the words of the Act, "whether any be culpable." There is no hill too high, no valley too low, no lane too long or remote, for the Coroner or Jury to reach. No difficulties or offensiveness of place or locality must deter him from performing his duty to the humblest of his fellow-citizens.

The action of the office is thus brought before the view of the whole of the public, and the citizens themselves, acting as jurymen, throughout every district, are enabled to bear witness to the protection which the office is enabled to confer upon all classes of the community. It is an office that does not rest. It has no "long vacation." The moment that an event has occurred which requires its interference, if it do not act, and instantly, the Coroner himself becomes a misdemeanant, a violator of the law.

In adverting to the two objects, for the attainment of which we doubt not that the office was instituted, we have placed, as the first, the *prevention* of crime. In this respect the office must be regarded as ever alive and active. The officers ministering to it are supposed by the law to be always on duty, and ceaselessly watchful of the lives of the citizens. Hence, should a death occur by violence, by accident, by misfortune, or suddenly, the machinery of the office is forthwith set in motion, and, in no case, if constables, neighbours, and Coroners, discharge their duties according to law, can any of the events that we have named escape from a scrutinising, searching, inquiry.

But it may be asked, and it is asked, by persons who ought to know better than to allow such a stupid, senseless question to escape their lips,—"Would you hold an "inquest in a case of sudden death where "it was morally certain that there *could* have

"been nothing wrong,—that poison *could not* "have been administered, that violence "could not have been inflicted?" And then the wiseacres who propose the question, in order to complete the full measure of their folly, proceed to argue that in cases of sudden death inquests ought not to be held unless there exists sufficient ground for *suspecting* that the death has been caused by criminal means. We blush to say that JUDGES, of the past, and even of the present day, JUDGES of the COURT OF QUEEN'S BENCH, have held this monstrously abominable doctrine. In some future articles we shall place in juxta-position the words of THE STATUTE and the language of THE JUDGES, and there will, we believe, be no difficulty in showing that the principle of security inculcated by the first is judicious and wise, and that the tendeucy of the last is to increase the sacrifice of life, and the number of the criminals, in a fearful ratio. The Coroners ought to feel themselves called upon to obey the statute law, to hold inquests in *all* cases of strictly sudden death, and to repudiate, with dismay and indignation, the pernicious and disgusting doctrine that they are not to call the functions of their office into operation unless, in the first case, there be a *well-grounded suspicion* of wrong doing.

The public should seriously reflect on this question. We cast aside all thought of the pecuniary interest of Coroners, in considering a matter of such vast magnitude. If the office were not to be called into activity in instances of sudden death, excepting there was *a suspicion of crime*, who would undertake the duties of the office? Would any man of mind or feeling voluntarily become the head and leader of such a hateful, such a horrible inquisition? We know not where such persons are to be found.

Let us reflect for a moment on the operation of the inquest according to the injunctions of the statute of EDWARD. Death occurs—suddenly—of the wife of a labouring man, living in a retired obscure place, on the side of the heath or common. The husband is a man of good character, sober moral. The woman was seen walking in the garden of her cottage at *eleven* o'clock. She is dead at *one*. A neighbour was summoned, who, on arriving, found the afflicted person speechless. A doctor is sent for, who, on entering the cottage, discovers a lifeless corpse. The constable hears of the death. The overseer hears of it, also; and so does Mr. JOLTERHEAD, the magistrate. "Is there to be an inquest?" says the constable. "I don't know," observes the overseer. "What are the circumstances of *suspicion?*" demands Mr. JOLTERHEAD. "None," replies the constable. "Then," says the magistrate, "if you give the coroner "notice, and he holds the inquest, I and my "brother magistrates will refuse the fees and "expenses." Whereupon, the constable cooly says, "If I bean't to be paid, I shan't give no notice;" and, accordingly, none is given to the coroner. In *this* case there may have been no crime.

Take another instance, occurring at a mile distant from the first, where it was known that *an inquest had not* been held in the case which we have just described. At this *second* place a man and his wife are living, *as it is reported*, "very comfortably." They are living, *according to repute*, on good terms with each other. There are no "suspicious circumstances." A quarrel takes place between them. The man, in a fit of jealousy, throws his wife upon the floor, and jumps on her body. In a few minutes she is dead. He adjusts her clothes, places the corpse in a chair, or on a bed, runs to the house of an acquaintance, makes an alarm, and dispatches a messenger for a doctor, but who, when he arrives, finds, as in the preceding case, that the poor woman has ceased to live. "Is there to be an inquest?" —"No." "Why?"—"Because there are no *suspicious circumstances*." "Ah," exclaims Mr. JOLTERHEAD, "*the doctor* would "see the marks of injury, if there were any, "on the body—the signs of bruises"—a most erroneous conclusion, we can inform our worthy reasoner. A fact, indeed, remains behind of even greater importance, namely, that

kicks, blows, and pressure with the knees, may rupture half the viscera within the abdomen, *without leaving the slightest trace or mark of violence on the skin*,—on the whitest, the most delicate, the finest-textured skin.

Mr. JOLTERHEAD and his companions will be disposed to ask if *the Coroner and jury* could discover any marks of injury, in the second case, by merely *viewing the body?* The answer to such a question is simply this,—Certainly not. But there is a *probability* worth considering, namely, that *if an inquest had been held in the case first described, the second death would not have happened.* The *fear of the inquest* would have been sufficiently strong to restrain the passion of the man who, in the absence of such a salutary admonition, has become a murderer.

Thus, by *waiting for suspicious circumstances*, an invitation is almost held out for the commission of crime, and when it *is* committed, *the criminals escape detection.*

THE BAT CLUB.

A

PRELIMINARY MEETING

Of several of the oldest members of this club was held at the

HOLE-IN-THE-WALL TAVERN, on WEDNESDAY EVENING LAST, NOVEMBER 9th.

There were present, on that occasion,

Sir B. BRODIE,	Mr. J. G. GUTHRIE,
Mr. B. TRAVERS,	Mr. STANLEY,
Mr. J. H. GREEN,	Mr. WHITE,
Mr. KEATE,	Mr. ANDREWS,
Mr. H. MAYO,	Mr. B. COOPER,
Mr. TYRRELL,	Dr. LATHAM,
Dr. SEYMOUR,	Dr. BRIGHT,
Dr. RODK. MACLEOD,	Mr. LLOYD,
Sir HY. HALFORD,	Dr. BURNE,
Mr. VINCENT,	

And some others, whose faces our reporter could not recognise.

The meeting, it appears, was called for eight o'clock, but several of the members did not arrive until a little before ten. At about half-past nine there was a loud inquiry for Mr. STANLEY, who had not yet made his appearance, and who, when at length he arrived, entered the room with a mind apparently in a state of confusion, and almost breathless from anxiety, or from the haste with which he had travelled. He apologised for his non-attendance at an earlier moment, and trusted that, as he had been professionally engaged, a professional cause for his absence would be received as a sufficient apology. At about six o'clock he had been called to attend a gentleman who had fallen from his horse, and sustained an injury of the knee-joint. The diagnosis was extremely puzzling, as, although a considerable portion of the patella was evidently detached from the main body of that bone, he was unable to distinguish at what part the fracture had occurred. He feared he should require the aid of some of his brother hospital surgeons in the case, with a complete history of which the club should be furnished hereafter. He would now read the circular that had been issued to the members generally, and explain afterwards why it was issued. It ran as follows:—

"Sir,—As I have ascertained, on a reference to the books in which the proceedings of the Bat Club were recorded in the year 1833, that you were a member of the club in that year, and as the institution was never authoritatively *dissolved*, I have particularly to request the honour of your attendance at the HOLE-IN-THE-WALL TAVERN, on WEDNESDAY next, the 9th day of NOVEMBER inst., to consider whether the club shall be formally abolished, and the accounts closed, or whether its meetings shall be resumed, and at what periods. I am, dear Sir, yours very faithfully,

"E. STANLEY.

"St. Bartholomew's Hospital,
Oct. 31st, 1842."

Such was the notification that had called them together. It would be useless to explain to the older members the sound, the scientific, the social principles of the Bat Club. They had all been participators in the benefit of the institution, and had shared in its enjoyments, and they also knew that the meetings had been discontinued for several years. The causes which had led to that result might have been guarded against by some judicious by-laws, but the simple question they had now to determine was, whether the club should be dissolved, or its meetings resumed under new and invigorating auspices.

Mr. LAWRENCE: Our secretary, Mr. Stanley, need scarcely be reminded that he is out of order. He has himself satisfactorily shown that the Bat Club is still in existence, and that this is one of its meetings. Indeed, he has stated that the question before us is, whether the club *should be dissolved*. It is contrary to our rules to discuss this, or any other question, at our meetings, without first electing a president.

Mr. STANLEY: Quite true. I admit that I was wrong. As secretary, then, in conformity with our laws and usages, I call upon

an individual member, and on this occasion I request Mr. White to propose a president for the evening.

Mr. WHITE: Being thus named, I at once propose my hon. friend Mr. Vincent. ("Hear, hear;" "Excellent choice.") My hon. friend has been too long distinguished for his eloquence, for his extraordinary facilities in unravelling intellectual difficulties, and for his peculiar powers of arranging and methodising any propositions which are submitted to his capacious mind, to require any eulogy from me to induce you to place him in the distinguished position of president for the night.

Mr. H. MAYO seconded the resolution, which was carried *nem. con.*

The PRESIDENT (much affected) took the chair, and thanked them for the honour thus conferred upon him. He hoped he should discharge the duties of his office satisfactorily.

Mr. STANLEY: In further explanation—(Several voices: "Order, order," "Move, move").

The PRESIDENT: Mr. Secretary, you are out of order. There is no motion before the meeting. (Cries of "Excellent chairman," and "Hear, hear.")

Mr. STANLEY: I am sure I beg pardon; but I will at once place myself in a proper position before the meeting, by moving, as a resolution, "That the Bat Club be forthwith dissolved, the funds distributed amongst the members, and the books destroyed." In making this proposition I am chiefly influenced by recollecting the manner in which we were lampooned and vilified in former years, and had I entertained the remotest conception that the members would vote for resuming our nocturnal meetings, nothing could have induced me to issue the circular which brought us together to-night; but I feared that some other member might try to revive the club: I therefore yielded to certain entreaties to call this meeting, in the hope that I should induce the majority to vote promptly for its dissolution.

Dr. MACLEOD saconded the mootion. It was dootful wather the cloob had ever randered any sarevice to the praufeeshun, and he could staat fram his oon paresonal knawlidge that it had been the means of casting a havey lood of ooblookay upon maany distinguished officers belonging to the hospitals.

Mr. BRANSBY COOPER. Sir, I have an amendment to propose: I don't care a d—n ("Order, order," "Chair, chair,") for the Secretary's qualms, nor for the obloquy described by the last speaker. There used to be life, soul, and fun, in the club, and I am for meeting again,—not so much for prosecuting dull plots and trumpery schemes, which almost broke up the club before, but for frolic, and joke, and creating a general *esprit du corps* amongst us. ("Hear, hear, hear.") I don't pretend to be a spouter, and can't deliver myself with the solemn and measured intonation of my enlightened friend, the Secretary. Therefore I propose at once, as an amendment, "That the meetings of the Bat Club be resumed, and that arrangements for the purpose be made forthwith."

Mr. GUTHRIE never supported an amendment more heartily. He was entirely for a resumption of the meetings. He cared nothing for satire or criticism. He was proof against both. Merit always made its own proclamation. For *his* part he was anxious that the meetings should be resumed, and he cared not a straw if the reporter for THE LANCET was always admitted. He was determined to speak always there, as elsewhere, as the greatest medical reformer of the age. ("Hear, hear;" "No more speeches;" "Order, order;" "Chair, chair;" "Submit the amendment.")

The PRESIDENT: Gentlemen, it is my duty, in conformity with Parliamentary usage, and the former practice of this club, to state that the following motion has been submitted to you (reads the motion); and that, since that, it has been proposed to leave out all the words after the word "that," and to substitute the following words. (Reads the amendment). That the words proposed to be left out do stand part of the question. As many as are of that opinion say "aye." As many as are of the contrary opinion say "no." The *noes* have it.

Mr. STANLEY: I demand a division.

The PRESIDENT: The members must please to divide; the *ayes* to the right, the *noes* to the left.

Ayes.—Mr. Stanley, Mr. Tyrrell, Dr. Macleod, Dr. Elliotson, Mr. Lawrence.

Noes.—Sir. B. Brodie, Mr. Travers, Mr. Green, Mr. Keate, Mr. Mayo, Dr. Seymour, Sir H. Halford, Mr. Vincent, Mr. Guthrie, Mr. White, Mr. Andrews, Mr. B. Cooper, Dr. Latham, Dr. Bright, Mr. Lloyd, Dr. Burne, and some others.

The numbers are, *ayes* 5, *noes* 21. It is now, therefore, my duty to offer the amendment to you as a substantive motion, namely, "That the meetings of the Bat Club should be resumed, and arrangements for that purpose made forthwith." Those who are for the motion say "aye;" against it, "no." The *ayes* have it.

Mr. STANLEY: I again demand a division. The four ayes in the previous case have now become the *noes*, and the *noes* have all become *ayes*.

The result, however, was received with great cheering, several of the members exchanging enthusiastic congratulations, and shaking hands with convulsive energy.

Mr. STANLEY: I resign; I throw up the secretaryship. I know well what will be the end of it. Talk of *fun* and *frolic!* I recollect nothing but torture and scarifications. Not a thing could we keep secret. Every word was published, and my late venerable

friend, Abernethy, emphatically declared that he believed the d——l had turned reporter. You must, therefore, at your next meeting, choose another secretary. I cannot act.

However, several well-merited compliments being bestowed on the Secretary, the heavy frown disappeared from his brow, and his dignified and handsome countenance was quickly adorned with an interesting smile. Finally, he relented, and consented to retain his office.

Mr. B. Cooper: Now sir, I am for having no more tom-foolery. ("Order," "Chair.") Well, I call it so, if Mr. Secretary will excuse me. I am for going to business at once. You have resolved that the club shall flourish. Now then, when shall we resume? *When*, I say? I propose "That a regular meeting of the Bat Club be held on this day fortnight, at the usual hour, and in this place."

Mr. Guthrie: I second the motion, but should prefer this day week.

Mr. Stanley: Take my word for it, the members will find this day fortnight too soon. The fruits of any meeting will prove bitter enough to most of us. (Cries of "Question, question!" "Chair!")

The President: I submit the motion as proposed. I declare that it is carried.

Mr. J. H. Green wished to know whether the next was to be an open or a close meeting.

Mr. B. Cooper: What's the difference? I don't understand it.

Mr. J. H. Green: I am surprised, sir, at the inexplicable forgetfulness of my honourable friend. I do not know, sir, that it is necessary, or that I am required, to go into any diffuse philological explanation of the words "open" and "close;" but that there exists a difference between their significations must, I should hope, and as I may almost positively state, be admitted by the generality—

Mr. B. Cooper: Sir, I admit I am wrong, for I can bear that confession better than my hon. friend's explanation. I wish he understood the word "brief," as well as "open" and "close." I am just reminded, sir, by a friend, that the close meetings are meetings of members only, and that at the open meetings visitors may attend.

Mr. J. H. Green: If, sir, the honourable member had condescended—

Mr. B. Cooper: What's *condescending* to do with it? ("Chair, chair." "Order.")

Mr. J. H. Green: When, sir, I was, as I think, and probably, justly think, so irregularly interrupted, I was about to offer as lucid an explanation as could be presented to the meeting of the two important words "open" and close;" and as that explanation would have presented no superfluous phraseology—

Mr. B. Cooper (*in a corner*): He's off again.

Mr. Green—but would have been precisely, exactly, unquestionably, similar to the one which has been offered to the club by my honourable friend—

Mr. B. Cooper: That's what you always say, brother Green, you are *going* to do it, and then it is done by twenty other people before you are up to the mark. You are *always* going to do it. Always *exploding*, but never *hitting* us. You remind one of a long-barrelled duck-gun, with the powder at top and the shot at bottom. Off goes your powder with a d—lish long whiz, but nobody is struck, excepting with the uselessness of the exploit.

Mr. J. H. Green: In meditating on this weighty subject, with that solemn seriousness which its importance imperiously demands, I shall endeavour—

Mr. B. Cooper: There! He's off again! I can't stand it. ("Chair." "Order.") I rise to order. I am up to *order* now. ("Order, order.") That's why I'm on my legs! What's the question? There's no motion before the club. I move, therefore, that the next be an *open* meeting, that visitors may attend; and I do trust that however many explanations my hon. friend may wish to hear from others, he'll give none himself, He'll pardon me for saying that when he attempts an "explanation," as he calls it, of one single word, his complicated phraseology's like a mile-long herring-net, run out to catch one little minnow. He'll pardon my remark, but his explanations quite choke me. There, Mr. President, I've submitted another motion. Who'll second it? It wants no *explanation*.

Dr. Seymour: I strongly approve of the open meetings. The motion before the chair greets me well. I approve and second it.

After a few additional words from two or three other members, the motion was put and carried unanimously, when

The President said, Gentlemen, the motion having been adopted, I should inform you that one of our by-laws states that the visitors to be admitted at any meeting should be named at the preceding meeting of the club, or that their names should be placed in the hands of the secretary at least three days previously to the assembling of the club.

Dr. Elliotson felt gratified on learninge that a strong disposition prevailed in the club in favour of the admission of visitors. It offered a great opportunity for elevating the character of the society, by affording opportunities for introducing there, and associating with, persons of great attainments and distinction; and as they knew that genius was not restricted to either sex, he felt confident that no restrictive construction would be put upon the by-law which regulated the admission of visitors, but that it would be administered in its largest and fullest sense, thus allowing its operation to

extend to talent and skill wherever they could be discovered.

Mr. WHITE begged to inquire if the learned doctor was not out of order, unless he intended to submit a motion to the meeting, there being now no question before the chair.

Dr. ELLIOTSON had no motion to offer at that time. His object was rather to obtain some information on the subject to which he was adverting.

Mr. LAWRENCE concurred with Dr. Elliotson in thinking that the arrangement of the club for the admission of visitors admitted of being used with considerable advantage to the members,—not only as a means of giving a moral tone to their social habits and professional pursuits, but extending to a far higher object and sphere. He could not refrain from saying that he thought that the opportunity might be made religiously useful, by introducing at their nightly meetings the highest and most pious dignitaries of the church, and when there was no question before the chair he would move that the right reverend father in GOD, Bishop Philpotts—

Mr. B. COOPER: Who? Who? Who? (Cries of "Hush, hush," and "Order.")

Mr. LAWRENCE continued: Bishop Philpotts, whose consistent maintenance of principle in politics, and whose amiable and generous toleration in religion, were too well known to render it necessary to offer any eulogistic comments on his character in that club.

The motion having been put from the chair, it was carried unanimously, when up started

Mr. BRANSBY COOPER, who said, Mr. President, I beg leave to propose as a visitor, Samuel Evans, Esq.

("Samuel Evans, Esq., Samuel Evans," ran through the meeting; and then, over and over again, "Samuel Evans, Esq., who is he?")

Sir B. BRODIE: Mr. President, may I beg you to read that by-law which relates to unknown visitors.

The PRESIDENT: Certainly. "When any visitor is proposed whose discoveries, scientific labours, or public services are unknown to the club, the proposer shall be required to state to the president the address of the individual, and his profession, and the nature of any distinctions which he may have obtained in art, science, or literature."

Mr. B. COOPER: I deny, Sir, that that by-law applies to *my* visitor, who is known for his scientific accomplishments throughout the United Kingdom. I've as much right to propose Samuel Evans, as brother Lawrence has to propose Bishop Philpotts. I don't think we have any business with bishops at this club, unless it's Bishop Sharpe.

Mr. GUTHRIE: Oh, ah! I see through it now! I've got the clue! Bishop Sharpe? Why he was a prize-fighter! We had him at the Westminster, and so we had Samuel Evans, *Esquire*, who, however, was better known in our wards by the title of "Young Dutch Sam."

Sir HENRY HALFORD: Such a motion I humbly and respectfully take the liberty of saying is somewhat like a scandal to the club. Indeed, Sir, I can hardly avoid intimating that it seems to me to approach very near to an act of gross immorality.

Mr. J. G. GUTHRIE: But Samuel Evans, Esq., certainly is a *scientific* gentleman. He s a kind of oculist, an operator on *eyes*, eh?

Mr. B. COOPER: You might call him a *brother* operator, Guthrie. There are oculists who put the light out of eyes as well as oculists who let it in. May be, both of you belong to the same class of practitioners.

Dr. ELLIOTSON; Perhaps the club will agree with me in thinking that we have had enough of this somewhat irregular debate. My honourable friend must surely see the propriety of withdrawing his motion. (Motion, by leave, withdrawn.) I beg to thank him for this mark of good sense, and I am sure he will allow me the liberty of saying that it is of the utmost importance that in proposing the names of visitors, the members should always keep steadily in view the dignity of the club, and its exalted reputation in the ranks of science. I hope that from this hour no name will be proposed, that is calculated to burlesque its proposer. In my previous observations I briefly remarked that genius was not restricted to sex, and that I confidently believed that the most liberal interpretation would be put upon the by-law which regulated the admission of visitors. I therefore at once submit to the club the motion which I have to make. You must have already anticipated its nature, though not, perhaps, its precise object. You are too well read in modern literature, too familiar with the labours of Mrs. Somerville, Mrs. Jameison, Mrs. Shelley, Lady Morgan, Mrs. Marcet, and many other ladies whom I could mention, not to be thoroughly acquainted with their reputation in this kingdom. But the name that I am about to propose has obtained an European fame, and the transcendant merits and superhuman capabilities of the lady to whom it belongs, render her an object of attraction and admiration throughout the whole civilised world. I have now only to propose that Elizabeth Okey,—whose knowledge of the divine science of mesmerism enables her at will to invert the actions of the senses; to see with her ears, to hear with her eyes, to smell by the touch,—be admitted to the club as a visitor at the next meeting.

At the conclusion of this address, the only two members at the meeting whose faces were not covered wtih their hands, were the president and the proposer of the motion. Not

being seconded, it was not submitted to the club by the chair.

Sir B. BRODIE then proposed the name of Sir James Graham, as he thought it very desirable that the Home Secretary should be invited to attend, that he might make any communication to the club which he might desire, relative to a "Medical Reform Bill" which he was about to introduce into Parliament. (Carried unanimously.)

Dr. LATHAM thought that if the subject of medical reform was to be considered in the club, Dr. Webster, from the British Medical Association, should be invited, and Dr. Hastings, from the Provincial. It was a highly interesting question, and as they had already fully determined on the line of policy that the club should adopt, and as they could not be moved from their purpose by any arguments that could be advanced in debating the question, it would make, at any rate, a *display* of liberality (hear, hear,) to invite the advocates of the proposition for demolishing the corporations.

Finally, the proposition for inviting the two doctors was carried, and, on the motion of

Sir HENRY HALFORD, an invitation was directed to be forwarded to Sir Robert Peel, as he (Sir Henry) hoped that the idea of having one fixed title in the New Reform Bill, would be scouted, and he thought it not unlikely that the genius of Sir Robert would enable him to suggest a sliding scale, with some rests in it, which would not be disadvantageous to the high moral character and dignity of the body to which he (Sir Henry) had the honour to belong.

This motion was received with uproarious applause, and the meeting separated, soon after midnight,—every one (by this time, even Mr. Stanley,) apparently anticipating a brilliant assembly on

THAT DAY FORTNIGHT.

BRITISH MEDICAL ASSOCIATION.

THE tenth anniversary meeting of the above association was, as announced last week, held at the British Coffee-house, Cockspur-street, on Tuesday evening, the 8th inst. The attendance was very numerous, and reckoned amongst its numbers many very distinguished members of the profession.

The chair was taken by the president, Dr. WEBSTER, who, in introducing the business of the evening, commented in strong terms upon the leading features of the Bill which Sir James Graham intended, last session, to lay before the House of Commons, with reference to medical law. He pointed out that so far from elevating the great body of the profession, its direct tendency would be to degrade medical men even more than the existing corporations had already done. Union, organisation, and energy, he considered to be the only means of effecting the important purposes for which the Association was formed.

The SECRETARY afterwards read the report, which brought under review the proceedings of the Council during the past year, and elicited repeated marks of approbation.

A series of resolutions, some *pro forma*, and others embodying the great principles for which it was deemed requisite to contend, were severally moved and seconded, and unanimously adopted.

The annual oration on "Medical Reform," was delivered by Mr. R. D. GRAINGER, and enumerated the grievances under which the profession labours, and contained suggestions as to the mode of their removal.

The business of the evening being concluded, the majority of the company held a *soiree*, and partook of refreshments, when several toasts were drunk, and many excellent specimens of vocal powers rendered in aid of the agreeable business of the evening, the proceedings of which extended, with the highest gratification to all parties, to a late hour. In the next LANCET we shall supply a fuller report of the proceedings of this highly interesting meeting. We may add here, that Mr. Secretary Belfour intended to be present at the meeting, from the Royal College of Surgeons, but was suddenly and accidentally prevented. In his absence, Mr. Stone, the learned beadle (in plain clothes), and his son, the sub-librarian, attended, to fulfil, with their eyes and ears, the duties of the worthy Secretary.

Food, and its Influence on Health and Disease. By MATTHEW TRUMAN, M.D. London: Murray. Pp. 240. Royal 12mo.

IT is certain that a vast number of human ailments might be avoided if people would modify their habits of living, and remove themselves from the numerous causes of disease which surround them. The doctrine that diseases come of themselves, has led many persons to conclude that most maladies are produced by causes over which they have no control. No opinion can be more erroneous, for almost every disease is produced by some external influence whose effects could either be combated or neutralised, if its mode of action were well understood. The advance of experimental science shows more clearly every day how much what is termed "the vital principle" is controlled and directed by external agents beyond what the older physiologists were willing to admit. Dr. Truman very properly inculcates that more benefit will be conferred on the human race by pointing out

the manner in which we may *escape* from different maladies, than by ascertaining how they may be *cured*. Thus, he remarks, that—

"No disease can be cured without injury to the health, for the remedies employed for this purpose always cause some excessive and unnatural action in the body, which lessens its power. If people would endeavour to ascertain how they may keep themselves free from disease—a kind of knowledge, judging from their conduct, they seem to be lamentably deficient in—they might very frequently escape even the pain and anxiety attending complaints that are ultimately cured. At the same time philanthropists do not seem to be aware that they would secure the poor much greater immunity from disease if, instead of establishing hospitals only, they were also to found charities for the purpose of affording the humblest classes of society the means of obtaining occasional relaxation and absence from many of their occupations, which, when persisted in continually, almost inevitably, from their unhealthy nature, bring on illness."

It is painful to reflect that even in those institutions where extensive plans of *hygiène* could be adopted with the greatest advantage, many means of health are in a great measure neglected; and we fully concur with the author in the following remarks respecting the management of some of the larger metropolitan hospitals; for what is called the Samaritan fund, or the money appropriated in some of them to send convalescent patients into the country, is quite inadequate to meet the wants of the numerous claimants on its bounty:—

"Whatever the wealthier classes may do, some time must elapse before any direct system will be adopted for endeavouring to prevent disease among the poor. But certainly it is much to be regretted that the governors of the principal hospitals in London, some of which possess endowments producing incomes of upwards of 50,000*l.* per annum, do not provide a place of residence for the patients in the country, during their convalescence, instead of keeping them shut up, as at present, in the close air of an hospital in town. To guard those who are beginning to recover, after a severe illness, from the chance of a relapse, by securing to them the advantage of country air, must surely come quite within the scope of the intentions of the founders of those princely establishments, and the managers of them only do half their duty while they neglect to provide for so important an object."

We have often exposed in this Journal the abuses of those human slaughter-houses that are called "dispensaries," most of which, while they produce great misery to the poor, also deprive the fair practitioner of the means of living, and merely serve as miserable puffing-shops for a few medical men who appoint themselves to the offices of "physicians" and "surgeons" therein:—

"The heads of families who make a point of contributing handsomely to public medical charities, under the idea that their servants, and the poor in whom they take an interest, will be able when ill to procure the best medical and surgical assistance from the officers of those establishments, would do more good by expending their money in a manner to secure such persons the means of desisting occasionally from their ordinary labours, and to remove from them as much as possible all external circumstances likely to be prejudicial to the health."

A considerable portion of Dr. Truman's work is devoted to the effects of different articles of food on the body, and to observations upon diet, which are interesting and instructive. The author imagines that the superiority of the Caucasian race of mankind may, in a great measure, be referred to their having originally inhabited that part of the globe to which the most nutritious food, both animal and vegetable, is indigenous. Upon the whole, there is a better method observed in this work than is usually observable in books which treat on the same subject. It may, therefore, be read with more than the customary amount of advantage attending the perusal of productions on diet and regimen.

QUESTIONS

RELATING TO THE SUMMONING OF

MEDICAL WITNESSES AT CORONERS' INQUESTS.

To the Editor of THE LANCET.

SIR,—In a late number of THE LANCET you gave a wholesome lesson to many of the profession who entertain erroneous views on the subject of coroner's inquests, and our thanks are due to you for the remarks you have made on a letter which you there inserted. It is not for one moment my purpose to justify the views of the writer of such a letter, for the facts are too clearly stated by him to throw even a doubt upon the justness of your conclusions, but simply to ask you, why you have not made extracts from other letters in your possession, and to these have appended some of your observations, for I cannot suppose but that some would have contained facts more to the point, and conse-

quently your remarks would have been the more valuable, and have served as a guide to many in cases of difficulty. I am the more tempted to do this on account of some cases which have recently occurred in my own practice, and which, as they may be considered by some to bear on the subject, I will beg leave briefly to relate.

1. A. B. received a severe injury of the foot, crushing two of the metatarsal bones to such an extent that I found it necessary to take them out; the case progressed favourably until the sixth day, when sloughing commenced, with profuse discharge from the wounds. The heat of the weather was now very oppressive, and symptoms of tetanus appeared; medical treatment proving of no avail, amputation of the leg was performed, but the symptoms gradually increased, and the patient died. The coroner held an inquest on the body, and, without the assistance of the surgeon, the jury gave the verdict.

2. C. R., a poor child, caught fire by the road-side, and was conveyed to the workhouse; after lingering a few days it died, and was buried: notice of which having been given to the coroner, he caused it to be disinterred, and held an inquest on the body. This time the surgeon received a summons to attend.

3. F. N. was buried under a slip of earth, and received such severe injuries that he was not expected to live an hour after he was taken out; he, however, gradually rallied, and appeared to be getting better until the ninth day, when he became worse, and died. The jury found the verdict in this case without the evidence of the medical attendant.

4. J. B. being ill, was visited by the surgeon in the evening; blood was taken from the arm, and medicines requested to be sent for in the morning, instead of which a message was received that the man died in the night. An inquest was held, but the surgeon was not summoned.

It is not my intention to offer any remarks upon the cases which I have so briefly noted down. I shall feel quite satisfied if they should be the means of again drawing your attention to the subject. I am daily more convinced that no certain rules exist in the practice of coroners with respect to their requiring the attendance of medical men on inquests, for on conversing with my friends from different parts of the same county, I find the custom of the coroners widely at variance. One gentleman tells me that the coroner for the town he resides in rarely holds an inquest without the assistance of the medical attendant. Another informs me that it is quite a novelty for the coroner in his part of the county to require a surgeon at an inquest. The one alleges as his reason for not summoning medical men, the difficulty he has found in getting his accounts sanctioned by the magistrates, when the fee for the surgeon appears in the said accounts. The other, I presume, has little difficulty in obtaining the magistrate's assent, or otherwise he would not so often require the attendance of the surgeon. I am, Sir, your most obedient servant,

CHIRURGUS.

October 24, 1842.

INFLUENCE OF PRUSSIC ACID ON THE EYES.

To the Editor.—Sir,—I shall feel obliged to any reader who has, by personal observation, ascertained the truth on the following points, who will publish the results of his inquiries:—

1. Has prussic acid, directed in vapour against the eyes, or used in any other way, external or internal, any influence on the organs of vision, either in health or disease?

2. Has prussic acid any effect on the cornea? Does it aid in clearing the cornea of opacities, such as those which result from corneitis, or from scrofulous ophthalmia?

3. Has it any effect on the motions or on the mobility of the pupil?

4. Has it any effect on the lens? Does it aid in dissipating the opacity either of lenticular or capsular cataract, or in promoting the absorption of lymph effused into the pupil?

5. Has it any effect on the retina? Is it of any avail in the treatment of amaurosis? I am, &c.,

BORUSSUS.

Aberdeen, Nov. 5, 1842.

COLLEGE OF SURGEONS.

To the Editor.—Sir,—Can you inform me whether general practitioners of only six months' standing can present themselves at the College of Surgeons, for examination, without producing any certificates of lectures or hospital practice? Or how long ought they to have been in practice so as to qualify themselves for the recent regulations at the College of Surgeons. Yours respectfully,

Nov. 7, 1842. HENRY BURTON.

*** We are not aware that the College has published any distinct regulations on the subject; but we have been informed, through indirect channels, that persons have been admitted to an examination who did not produce the certificates which are specified in the published regulations. If the examinations were public, and they offered a fair means of testing the abilities and acquirements of the candidates, we should offer no objection to the course of proceedings which, it is stated, the Court of Examiners

is now pursuing. We believe it is quite true that persons who have been in practice for some years are now admitted to an examination without being required to produce the customary farrago of "certificates." As an act of courtesy to the profession, the Examiners of the College ought to publish a distinct statement on the subject.

LAW PROCEEDINGS AT DUDLEY.

To the Editor.—Sir,—I think it due, in common justice, to the Apothecaries' Company to state, that on the morning of publication of THE LANCET for October 22nd ult., a letter was received by one of "the Seven" (as the medical practitioners of Dudley are facetiously styled by Mr. Lloyd), intimating that the Society had resolved upon prosecuting Mr. Lloyd, and giving instructions on the subject to a highly respectable and talented solicitor. This proceeding, on the part of the Society, has been voluntary, and not forced upon them by the paper published *simultaneously with their address* to the "one of the Seven;" and my object is to disabuse the opinions of the public, who may conceive the measure to have been compulsory, and not the consequence of the free judgment of the Apothecaries' Company. Moreover, you must be aware that owing to the long (law) vacation, and the tedious interval that would, under ordinary circumstances, have elapsed previous to the county assize for Worcester, any steps adopted by the Society would have been nugatory at an earlier period. Apologising for trespassing upon your pages a second time, and authenticating my communication in a separate note, I am, Sir, your obedient servant,

A SUBSCRIBER.

Dudley, Nov. 1, 1842.

THE FUNDS OF THE APOTHECARIES' COMPANY.

To the Editor.—Sir,—Your correspondent, who wishes to know the appropriation of the money received for the examinations at Apothecaries' Hall, will find, on consulting the report of the Society, printed by order of Parliament, in 1834, that the Court of Examiners does not receive one half of the amount, and that the remainder is applied to the public service. Moreover, he will learn that the Court has no compensation whatever for the examination of unsuccessful candidates, who so frequently shelter themselves under the broader banners of the Royal Colleges of Physicians and Surgeons: another proof, if such were wanting, of the insufficiency of either of the examinations of the latter institutions for the purposes of general practice. I am, Sir, your obedient servant,

AN OLD APOTHECARY.

9th Nov., 1842.

LATIN SYMBOLS IN CHEMISTRY.

THE question of the disadvantage to "practical chemists" of employing symbols and a dead language in papers and works relating to chemistry and its processes, being frequently raised by persons who are more engaged in the manufacturing department than that of discovery and instruction, those points have been discussed by Berzelius in the 5th vol. of his "Treatise on Chemistry," in the following manner, and in favour of a resort to the Latin; "and," says the editor of the "Annals of Chemistry" (Oct. 7th), "we earnestly urge chemists of all classes to practise the use of these symbols, whose principal advantage is that they compel writers to think closely, and express their views accurately:"—

We choose for these symbols (or chemical signs) the initials of the Latin names of the bodies they are intended to represent. Thus, for instance, we take C=carbon, Cl=chlorine, Cr=chromium, Cu=copper, Co=cobalt.

These initials have been chosen from the Latin nomenclature because that language is recognised by natural philosophers of all countries, and is accessible to all, without requiring to be changed to suit the idioms of different languages. It cannot be disputed that this is an essential advantage, and most of those who have used it acknowledge the same. A French author (Beudant, Essai d'un Sciences Physiques, Minéralogie,) has had the national vanity to substitute for these initials others, taken from the French language. Should the English, German, and Italian writers pursue a similar course, much of the distinctness and comprehensibility of these formulæ would be lost, without yielding the least advantage: it is, however, to be expected, from the enlightened views of the majority of true philosophers, that they will not sacrifice the advantages enumerated, to such childish vanity. "Science," as Sir Humphry Davy observed, at the presentation of the Copley Medal to Arago, for his discovery of the magnetic state of copper during rotation, "science, like that nature to which it belongs, is limited by neither time nor space; it belongs to the world, and is of no country and of no age."

DANGER and FLANDIN have found, that in poisoning by *antimony*, that metal is not to be found in the lungs, nerves, muscles, or bones, but chiefly in the liver. The antimony may be separated in the same manner as arsenic.—*Chem. Gaz.*

THE CARDS AT THE BED-HEADS.

Dr. Watson, in a recent lecture to his pupils, at the Middlesex Hospital, pays the following compliment to the diagnostic judgment of his colleagues, generally, in the London hospitals:—

"Your observation in the wards should be searching, until you have satisfied yourselves of the identity of each case with those of which you have acquired a knowledge from books or discourses. You must not trust to the names on the cards appended to the bed-head, nor be by them satisfied that the disease of the patient has been properly described. These names are often *misnomers*, for it cannot be expected that in every instance a disease can be accurately diagnosticated in the taking-in room. Besides, there are many instances in which the medical attendant is baffled or misled by appearances, and in which cases are at first classified under wrong names. Were the student to depend implicitly on those cards, they would be calculated to do him a great disservice, in inducing remissness and neglect of personal examination. Anything else than a true diagnosis of disease is not only uninstructive, but absolutely injurious, for it leaves false impressions, and is calculated to lead to *improper treatment*. I cannot too earnestly impress on you the necessity of acquiring a habit of systematic observation; this is *quickly* matured into prompt and accurate discrimination, and will prevent hereafter the indecision which too frequently occurs, to many a patient's peril. You will have no card to guide or aid you (to *mislead*, the learned doctor might have said) when you come to practise independently."

Probably such a confession was never before made by one in the secret, in any "recognised" hospital in England. What *pupils* are told that they may actually do *quickly*, if they have but cultivated "habits of systematic observation," the physicians (if not the surgeons) who have been appointed under "the system," to the metropolitan hospitals, are not able to do yet; for "these names are—*often* misnomers!" They would seem to be very discreet at the *Charing-cross Hospital*, where the absence of cards only *indicates* what Dr. Watson very candidly proclaims out loud.

DISINTERESTED AND MODEST—A CARD.

"Doctor Jacob advises pupils who propose to attend his lectures on anatomy and physiology at the College of Surgeons, during the ensuing session, to attend his introductory course on comparative anatomy *also*, as it embraces the principles of zoology, which they are now required to understand. Hour of lecture, four to five."—*Dub. Press*, Oct. 26.

REFLECTIONS OF RODERICK MACLEOD ON "PRIVATE TUITION."

There is a thing, of comparatively recent existence, but which is daily gaining ground in the metropolitan schools, and has already done something to assist in improving the cast of medical students, at the same time that it bids fair to effect much more. We refer to the system of *private tuition*. Some objections are urged against it on the ground of its increasing the expense of medical education, and giving to those who can afford to avail themselves of it, an unfair advantage over their poorer brethren. Even granting that these objections are valid, we still maintain that the general good effect of such a system, if brought fairly into operation, would be *very great*, and it would tend, in various ways, farther to improve the character of students, and, by its influence on them, to advance the science of medicine. Look at the Universities of Oxford and Cambridge, where a plan of this sort has been long and extensively carried out, and has even, in a great degree, *supplanted the professorial mode of teaching in classes*. It is well-known that almost all who are desirous of taking even a respectable station in the examinations, have recourse to a private tutor, whose advice and close superintendence they well know is *more likely to ensure their success than the regular instruction of the public professor*. Very few indeed carry off the high honours in the university without having recourse to such assistance in their studies. Here the tutorial system, as it has been called, has received a full trial, and no other proof of *its efficiency* need be given than the extensive manner in which it has been there adopted. Its effect is good. The opportunities of supervision and direction afforded by it are such as can be ensured in *no other way*, and such as are truly *wanted* by the generality of students, who, coming up to the schools, are plunged in the *whirlpool of lectures*, dissecting, and hospital practice, scarce knowing *which way to turn*, or *where to begin*. They have no one to direct their studies, and are ignorant what subjects to commence, what books to buy, or what order to follow. They enter upon their studies,* perhaps, with good determination; but their endeavours fail for want of proper direction; they become disgusted with the little progress they make, throw aside their books, and betake themselves to amusements. A careful system of private tuition would, no doubt, prove a powerful remedy to many of these evils. To some who are about to enter upon their medical education in London or elsewhere, with the commencement of the session, we would recommend them to give the subject a careful consideration; and should they adopt

* For "their studies," read "the recognised courses."—Lancet.

some such course as we have advised, they will not, we think, have any reason to regret the step they have taken.—*Green Journal*, Oct. 7. *** Roderick is rapidly shedding his skin.

BLACK PITCH.

Dr. Hinxman (of Bury) writes, at the close of a recent letter to the Editor:—"In a former number Mr. Harvey very acutely asks Mr. Wardleworth why the black pitch which he (Mr. W.) recommends (being a *gentle aperient*) as a valuable remedy in hæmorrhoids, is inadmissible during pregnancy. To which Mr. W. replies that he was induced to believe that premature labour had been excited by its influence. Instead of thus leaving us in the dark by so brief a reply, I think it would have proved more satisfactory to Mr. Harvey, and the rest of the profession who read his paper, if Mr. W. had informed us in what manner he supposed the black pitch to have acted to thus induce premature labour. It could not have been induced by its aperient property if its action be as gentle as he describes."

SECRET REMEDIES IN FRANCE.

The sale of secret remedies is prohibited in France, unless legally protected by patent, which is never granted without a report from the Royal Academy of Medicine, certifying the harmlessness of the remedy. This is not the only hindrance to the sale of those compounds. Our London warning "Bill-stickers, beware!" is uttered with more authority by the French law; and it would appear that the Parisian quack is destroyed, like a parasitic plant, by removing him from the wall. This fact is thus exemplified: "A practitioner caused a placard to be affixed on the shop of a grocer in the Rue St. Denis, advertising a remedy against secret complaints. The grocer brought an action against the doctor, who was condemned in 2*l.* damages. The court cautioned Dr. M. not to affix placards on the walls lest he should incur renewed actions for damages.

If it were made illegal to post the walls thus, or to advertise them in the newspapers, quack medicines could not exist. Few empirical preparations could stand the silent system. Again, M. Boubee is a regularly educated *pharmacien*, rivalling M. Beral in the preparation of citrate of iron, and established at Auch. He contrived a syrup to banish gout from France, affixed his name to it, and in time sold it in several shops at Paris. But M. Boubee forgot to register the exact composition of his sedative solution. This at once turned the syrup into a secret remedy; and he was cited before "Le Tribunal" to answer for the advertisement and sale of secret remedies. Not appearing, he was recently condemned to ten months' imprisonment, and a fine of 24*l.*—*Ann. of Chem.*

Westminster Medical Society, Nov. 5th.—The evening was chiefly occupied by the relation of two cases, one in which unceasing constipation terminated on the 45th day, the post-mortem examination disclosing mechanical obstruction, by scirrhus, at the junction of the sigmoid flexure with the colon. Half a pound of fluid mercury, swallowed as a remedial agent five days before death, had wholly disappeared as a metallic substance. The other case was one of fatal abscess connected with the liver, in which paracentesis was performed. Its peculiarities consisted in the absence of rigors and perspiration, and of the gall-bladder. We shall not have room until next week to publish the reports. The Society meets again on the 19th instant, when Mr. Dunn is announced to relate a case of convulsions in a child, with disease of the mucous membrane of the bowels.

London Medical Society, Nov. 7th.—A case was related this evening in which the median nerve being wounded in bleeding, the patient had contraction of three fingers, which was cured by an operation connected with the cicatrix. Falling under a similar misfortune on a second venesection (probably the poor girl was a dispensary patient), a like consequence followed, and was similarly cured, but not permanently. How to mend her case occupied the discussion; after which a case of presumed poisoning by camphor, taken to revive the spirits, was related. We shall probably have room for a report of the proceedings next week.

Royal Medical and Chirurgical Society, Tuesday, Nov. 8th.—The Society held its first meeting for the session this evening. There was a crowded audience. The uncourteous custom still obtains of keeping invited guests waiting in an ante-room. A report of the proceedings may appear in The Lancet next week.

Royal Medico-Botanical Society, Nov. 9th.—The first meeting for the session was held this evening. A report of the proceedings in our next.

ROYAL COLLEGE OF SURGEONS IN LONDON.

List of gentlemen admitted members on Friday, Nov. 4th, 1842:—H. Challinor, B. K. Johnson, J. Thompson, C. E. Prothero, W. Higgins, H. Marder, E. Jay, A. Ebsworth, R. B. Halcott, W. H. Hay, R. Jones;

BOOKS RECEIVED.

Clinical Midwifery, with the Histories of Four Hundred Cases of Difficult Labour. By R. Lee, M.D. London: J. Churchill. 1842. Pp. 224.

A System of Practical Surgery. By Wm. Fergusson, Professor of Surgery in King's

College, London. With 246 Illustrations on Wood. London: J. Churchill. 1842. Pp. 596.

Retrospect of the Progress of Medicine and Surgery, for 1841-2. By Mr. E. O. Spooner and Mr. W. Smart. Read June 30, 1842, before the Annual Meeting of the Southern Branch of the Provincial Medical Association, and published at its request. Blandford: William Shipp. 1842. 8vo.—We shall select a few paragraphs from this work, and print them among our articles of intelligence, prefixing to them an asterisk, or *. The profits derived from the sale of this publication are announced by its authors to be intended to be added by them to the benevolent fund of the association.

On the Treatment of Syphilis by Tartarized Antimony. By Alfred Smee, F.R.S., Surgeon to the General Dispensary, Aldersgate-street, &c. Pp. 7.

Elements of Physiology, for the Use of Students, and with especial Reference to the Wants of Practitioners. By Rudolph Wagner, M.D., Professor, &c., Gottingen. Translated from the German, with Additions. By Robert Willis, M.D., &c. Part 2 (of Nutrition and Secretion). With 80 Engravings on Wood. London: Sherwood. 8vo. Pp. 223.

The Anatomy of Sleep; or the Art of procuring Sound and Refreshing Slumber at Will. By Edward Binns, M.D. London: J. Churchill. 1842. Pp. 394.

TO CORRESPONDENTS.

To the Editor.—Sir,—Will you please to inform me what are the necessary steps that should be taken to procure a foreign diploma of M.D., and also whether its possession would confer any privilege on the possessor, in common with those of London or Edinburgh. Also, if the medical reform that is in contemplation would be likely to affect it. Your obedient servant, MEDICUS.

London, Nov. 8, 1842.

*** We question if such a document would be of any value under an effective system of medical reform. We shall not show in this place with what facilities foreign diplomas in medicine can be obtained. If the required steps to procure them were fully explained, we fear that a very large importation of them would be the almost immediate result.

Viensis.—Yes. Sir Astley Cooper lectured on surgery during many years at St. Thomas's Hospital while he was one of the surgeons of Guy's Hospital. 2. His class on Monday and Wednesday nights often exceeded four hundred in number. 3. He was the most successful, the most practical, and the most popular medical lecturer in the metropolis. The pupils thoroughly understood him. (Does Mr. Green object to good precedents? Example is better than precept.)

We insert the letter at page 266, in order that the subject may be viewed in all its branches, and shall embody the answers to the questions in the course of our general remarks on the duties of Coroners.

The suggestion of *A Country Practitioner* (Sheffield) shall be communicated to the learned author himself.

A. G. R. next week.—The letter of *Mr. Haden*, and many other correspondents, in an early number.

To the Editor.—Sir,—Much discussion has taken place between myself and friends respecting the true and proper description of an inflammatory complaint which some of the profession describe as *"feverish cold."* The latter description has been denounced as incorrect, in which opinion I concur. There does not appear, however, to be any general rule for altering my opinion, although several medical gentlemen consider me in error. The question by consent has been referred to you, and if you would condescend to answer it, I shall always feel obliged, I am, Sir, your obedient servant,

R. M. HAWKE, Accountant, &c.

Falmouth, Nov. 2, 1842.

*** It would be scarcely possible to find a more incorrect term. A *hottish cold*, or a *coldish heat*, would not be a less absurd expression.

To the Editor.—Sir,—It is usual for a certain number of the inhabitants of every parish to be served with notices to appear before the magistrates, to be sworn in as special constables for the year ensuing. Is a licentiate of the Apothecaries' Hall, in actual practice, liable to serve as a special constable under such circumstances? I do not presume this to apply to there being any apprehension of disturbance, as every inhabitant would then perform his duty. Your obedient servant,

A SUBSCRIBER OF EIGHT YEARS.

Bath, Nov. 7, 1842.

*** Yes, licentiates of the hall are liable to serve as special constables, but not as ordinary parochial constables. The Court Leet has no power over them in that respect.

A letter from *Mr. J. H. Tucker*, of Berners-street, on the subject of Dr. Robert Lee, was received by us on the 8th inst., but the communication at p. 256 was forwarded, and in type, a week previously. Mr. Tucker defends the craniotomies of Dr. Lee. But the subject seems to us to be of too much importance, and the facts stated to be of too startling a nature to be discussed thus indirectly. The occasion is one on which Dr. Lee should speak in his own proper person.

We are much obliged to the Editor of the *Court Gazette* for the number of that journal (Nov. 5) containing two notices of the trials at Barnstaple, an ample report of which, however, appeared in THE LANCET of last week.